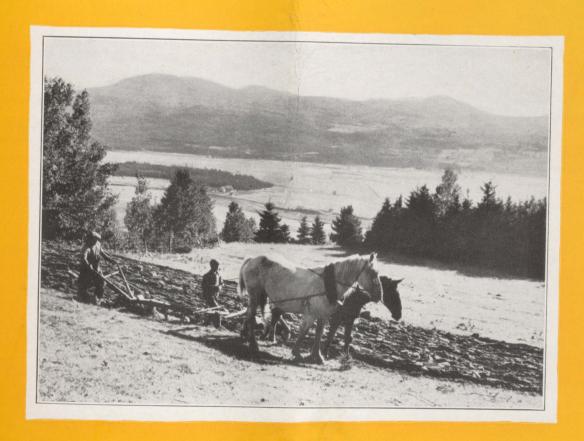
MACDONALD COLLEGE JOURNAL



VOLUME 4 No. 8



APRIL 1944

Farm · Home · School



The FEED behind the FOOD...

High grade production on the farm is only possible if the feed is high in protein properties and in nutritional value. Sherwin-Williams Linseed Oil Meal has long been a favourite among farmers, especially in wartime when an increasing quantity of Canadian bacon and dairy products must be shipped overseas.

THE SHERWIN-WILLIAMS CO.

of Canada, Limited Head Office MONTREAL

LINSEED OIL MILLS AT WINNIPEG AND MONTREAL

SCREW PRESS LINSEED OIL MEAL



THE MACDONALD



COLLEGE JOURNAL

Education - Partner in Reconstruction

In his recent speech, Churchill focused public attention again on the importance of better education. Referring to the new Education Bill as the 'greatest plan for improved education that has ever been attempted by a responsible government', he said:

"I don't think we can maintain our position in the post-war world unless we are an exceptionally well-educated people, and unless we can handle easily and with comprehension the problems and inventions of the new scientific age".

The war has done much to emphasize the need of more popular education but its relation to the whole scheme of reconstruction has not been put so clearly before. The teacher now becomes a partner with the scientist, the doctor, the builder, the transport expert, the public administrator, and the rest in a joint enterprise. Not any longer is education to be just a luxury frill to life, nor a tiresome means of achieving status. It is now part of the job of living—even of survival—in a complex and challenging world.

Changes in Education

What this will mean in the way of changes in education is of major importance. Certainly, the various agencies of education, — schools, colleges, and adult groups, — will need to work together to a greater extent than they have done before. They will need to recognize that they share a common task. Just as certainly, they will need to get closer to the serious business of learning how to solve the everyday problems of life. Schools will need to specialize far more than they now do, to equip people with the varied skills required in an intricate society. If education is related earlier to jobs, however, it will have to continue longer, perhaps on a parttime basis as now proposed in Britain. That the scope of educational efforts will be greatly extended is almost a foregone conclusion. But this will all be possible as

people come to realize more fully that education is essential to fuller life.

Adult Education

An agricultural college is naturally interested in education at the adult level. Moreover, its concern for agriculture has kept it practical. But there have been many difficulties in the way in recent years. On the one hand, the development of scientific agriculture has been so rapid, and the duties of teaching so absorbing that a limited staff has had little time for extension work. On the other hand the problems of finance and communication have been increasingly great. Recent experiments in the use of films and radio in adult education have opened up tremendous possibilities. These new means will prove of great value in the dissemination of scientific information and advice. When transportation becomes easier, a fuller co-operation with community schools, county organizations, rural fairs, etc. will be possible, while a resumption of the short courses offered at the College will bring many more rural people into contact with its work.

Not a Competing Programme

But all these activities of the College are merely its contribution to a common task. As farm forums, community schools, film circuits and leadership training courses have developed the Adult Education Service has become a many-sided programme. But it is not a competing programme. It desires to co-operate with existing organizations, to work through them when possible, and its facilities are available to be used by whoever wishes to do so.

Our Cover Picture

For our cover picture this month we are indebted to the National Film Board.

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Chemistry Solves Wartime Food Problems

by R. A. Chapman Department of Chemistry.

When wheat is milled the germ is taken out, and much of it is sold for table use, to be mixed with cooked cereal. When it comes from the mill, however, wheat germ contains a high percentage of oil and in this state does not keep well: no amount of research has, as yet, found any better way of preventing it from going rancid other than by removing the oil.

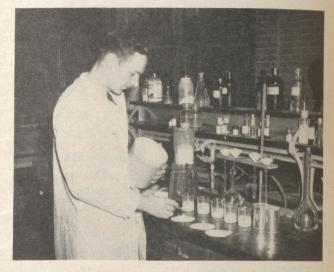
This wheat germ oil is an excellent source of Vitamin E, is used by doctors for medicinal purposes, and is used to some extent as a stock feed. But research which has been going on at Macdonald College for the past two years shows that it can also be used for an entirely different purpose — namely, to keep such things as lard, shortening, and cooking oil (such as is used in frying potato chips), usable two or three times as long as usual.

Unless they are kept away from air many fats and oils quickly become rancid, develop strong odours and become unfit for use. The problem was to find something which could be added to the shortening which would not spoil it for ordinary use but which would prevent it from going bad or, if not entirely prevent it, at least delay spoilage. Wheat germ oil may help to solve the problem.

Chemists have known for years that wheat germ oil, when added to some fats or oils would make them keep longer. It does this by slowing up the rate at which the fat absorbs oxygen from the air. But we have now found that when wheat germ oil is combined with two other substances, an hydroxy acid and lecithin (both of which are natural parts of all foods) in certain proportions and this mixture is added to shortening or cooking oil in small amounts (one tenth of one percent), the shortening would keep two or sometimes three times as long as usual. More work remains to be done on this problem but the results so far are most encouraging.

Preserving Powdered Milk

Wheat germ oil is also proving its value for preserving powdered milk. Since 1939 Canadian production of whole milk powder has been steadily increasing: our 1943 quota was sixteen million pounds. A great deal of this milk powder will be shipped to the armed forces all over the world. The Red Cross uses a lot of it in parcels for prisoners of war. Under present shipping conditions it often takes a long time to reach its final destination and when it does finally arrive it may be found to be useless because the butterfat it contains has gone rancid. Milk powder which has been made in old equipment is particularly bad in this respect, for wherever the tinning in the vats, pipes, and so forth has been worn off and the copper is exposed, some of this copper becomes dissolved in the milk, and the presence of copper in milk hastens spoilage of the



The author testing samples of milk powder.

butterfat. Milk powder made from milk containing copper has an unpleasant, tallowy taste and spoils quickly.

Of course, any milk powder will keep well if it can be kept away from the air. This can be done by packing it in tins, but tin is at a premium these days. What could be done to make the powdered milk keep well when packed in cardboard containers?

Wheat germ oil again came to the rescue. It was found that when the wheat germ oil antioxidant (in the proportion of one tenth of one percent of the butterfat content of the milk) was homogenized into a small amount of skim milk and mixed with the whole milk before the drying process, the resulting milk powder had a much longer life. This was particularly true when the copper content of the milk powder was high, though results were not so marked with milk powder made in high grade, stainless steel equipment.

Raising the Vitamin Content

Scarcely a day passes that we are not shocked by a picture from one of the occupied countries showing a group of emaciated, starving children. The United Nations are already making plans for the day when hostilities will cease and they will be able to supply food to begin the job of rebuilding bodies that for years have not known proper nourishment. Milk powder is sure to be included in the first shipments, since it is a highly concentrated and nutritious food. However, as compared to other sources such as fish oils, it is low in vitamins A and D. The possibility of creating a product which would combine the food value of milk with the vitamin content of fish oils has been interesting Macdonald College chemists for the past year and they now can report considerable success.

(Concluded on page 8)

THE WARTIME PRICES AND TRADE BOARD

FARMERS' BULLETIN

MAPLE SYRUP SALES

Order No. A-1125—Effective March 6, 1944.

Primary producers may now sell maple syrup direct to consumers at standard retail prices. Maximum prices per Imperial gallon for direct sales, in screw-top metal containers, f.o.b. nearest shipping point, are:

Ungraded syrup	\$2.40	Canada Medium Grade \$2.90
Canada Dark Grade	\$2.65	Canada Light Grade \$3.15

Price will be 25c. less if sold in bulk. If sold by grade, the grade must be clearly marked on container; otherwise price for ungraded syrup applies. Grading must be in accordance with the Maple Industry Act and the colourimeter approved by Federal Department of Agriculture.

A premium of 25c. per gallon over the "Canada Light" price has been fixed for syrup grading "Fancy".

MAPLE SUGAR: Maximum selling prices per pound	are:
Loose-packed in bags or other containers, com-	
monly known as "farmer's run"	.22
½, 1, 2 or 4 lb. blocks	.350
Maple wax (la tire), maple butter and maple	
	20

COUPONS: Until May 31 one "D" preserves coupon covers purchase of one quart (40 fluid ounces) maple syrup, or 2 lbs. maple sugar, or 12 fluid ounces maple butter. Maple wax and maple cream are not rationed. After May 31 one "D" coupon will be good for 24 ounces of maple syrup.

A farmer may use his own maple products on his own premises without surrendering coupons. He must collect coupons for all direct sales of rationed maple products off the farm, and forward coupons to his Local Ration Board.

Mail Order Sales of Rationed Maple Products

Loose coupons must not be accepted with mail orders. In exchange for four "D" coupons a special voucher, covering purchase of one gallon of maple syrup, can be obtained from Local Ration Board. Producers cannot ship syrup unless this voucher accompanies order.

Vouchers received by producers may not be transferred, exchanged, negotiated or deposited and should be forwarded to Local Ration Boards by 10th of each month in postage-free Farmer's Envelope, RB-61, together with coupons and other valid ration documents from other maple product sales.

A producer receiving vouchers for a greater amount of maple syrup than he can ship must return unused vouchers to sender. Such unused vouchers can be converted back into preserves coupons by applying to the Local Ration Board.

PREMIUM FOR SEED POTATOES

Order No. A-1129 Now in Effect.

This order continues premium prices for sale of seed potato stock in any quantity. Premium prices are based on ceiling price per pound for Canada No. 1 table stock in any zone during the period March 6 to April 2, 1944, plus:

1c. per pound for Certified Seed; 1½c. per pound for Foundation A Seed;

2c. per pound for Foundation Seed.

No matter when sale is made, the premium for seed is added to ceiling prices for Canada No. 1 table stock of that variety for the March 6 — April 2 period.

In the case of seed potatoes from Prince Edward Island and New Brunswick shipped to points outside of Zone 1, however, premium is added to the March 6 — April 2, 1944, Montreal ceiling for Canada No. 1 grade, and Maritime shippers may add to their prices additional freight costs from Montreal to any point west of that city.

No increase in price for seed potato storage will be allowed above the March 6 price adjustment.

POTATO STORAGE CHARGES

Order No. 929 Now in Effect.

This order setting the ceiling prices for table stock potatoes provides that storage charges may be added to the ceiling prices in each zone commencing January 10, 1944. Storage allowances which may be added for the period March 6 to April 2 are 20c. per 75-lb. bag; 27c. per 100-lb. bag.

SALES OF MEAT BY FARMERS

During suspension of meat rationing, a farmer, or a person who raises livestock, can slaughter (or have slaughtered for him) without slaughtering permit, livestock raised on his own premises, for direct sale of meat to a household consumer for the consumer's household or personal consumption. Such meat need not be stamped.

A farmer cannot sell meat to any other class of buyer without a slaughtering permit.

A farmer selling beef, lamb and veal to household consumers must offer standard retail cuts and, in the case of beef, must indicate the quality—commercial, plain, cow and bull, or cutter.

A farmer can sell fresh pork in any form he chooses.

Supervisors of Public Markets will be kept informed by the Wartime Prices and Trade Board regarding legal meat prices for sale by farmers. Information also can be secured from local Board officials.

WAR DEMAND FOR HORSEHAIR

Horsehair is urgently needed. It is used to make gun-cleaning brushes, industrial brushes for use in war plants, navy mattresses, shock pads and cushions for army trucks and aircraft. Price for good quality horsehair from mane and tail combings ranges from 30 cents to 50 cents per pound. Any wool and hide dealer will buy it.

For further details of any of the above orders apply to nearest office of the Wartime Prices and Trade Board

Faraday, the Experimenter

by W. Rowles
Department of Physics.

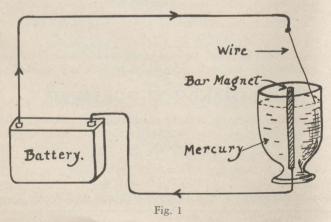
Recent scientific discoveries are so remarkable that we are apt to forget the long struggle of patient workers in their laboratories in byegone years. As we flick the electric switch to obtain light or "power" we should remember them, and particularly Michael Faraday. The ancient Greeks knew something about electricity, but they did no experiments to extend their knowledge and centuries elapsed before any real advances were made.

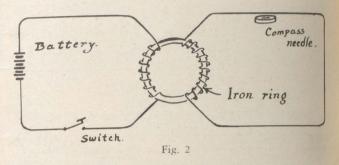
Michael Faraday, who lived about a hundred years ago, believed in experiments. He performed thousands of them and made careful records of his observations. This simple, modest, self-taught philosopher may justly be called the father of electrical science. He is an inspiration to many scientists today.

Faraday's father, a blacksmith, died after a long illness leaving young Michael to help his mother provide for the family. This he did, first as bookseller's errand boy, and later as book-binder's apprentice. He had very little education but read diligently in his spare time any scientific books he could get hold of. He performed a few chemical experiments and made some simple electrical apparatus.

In the winter of 1812 he attended four lectures in chemistry given by Sir Humphrey Davy, and made neat and careful notes. These he later sent to Davy "as proof of his earnestness" and asked for a job, even the most menial, at the Royal Institution. Davy was so pleased with the letter and notes that young Michael was hired as laboratory assistant and before long he was doing experiments on his own.

Faraday made many important discoveries in chemistry but he soon became more interested in physics. In his day, it was known that an electric current, flowing along a wire, created a magnetic field in its vicinity. Faraday did many experiments to study this and finally, by the use of apparatus similar to that shown in Figure 1, he was able to produce *continuous* motion.





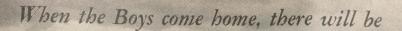
The wire, indeed, revolved continuously round the magnet, thus producing the first electric motor! It was many years before real motors were built, but this discovery of Faraday's clearly showed the principle involved.

The important discovery of electric motors would, by itself, have been of little use, because there was no satisfactory way to produce electric currents to run them. Crude and expensive batteries had to be used. Faraday discovered the answer to this problem after many years of search. He knew that magnetism could be produced by electricity, but no one had ever produced electricity by magnetism. Faraday felt that this might be possible, and in 1822 he wrote in his notebook "Convert magnetism into electricity". Repeated attempts failed but in the summer of 1831 he finally got a clue. His apparatus was similar to that shown in Figure 2 and he observed a movement of the magnetic needle when the switch was closed and again when it was opened. It was not much, but it proved that the magnetism, produced in the iron ring by current from the battery, had produced electric currents in the second wire coil!

The currents only lasted a moment but they were there. So day after day he tried alterations and improvements and on the ninth day he produced a *continuous* current by turning a copper disk between the poles of a powerful horseshoe magnet. This was the *very first* dynamo-electric machine. It was the forerunner of the familiar wind-electric machine, as well as the giant dynamos at Niagara and Shipshaw.

It came after a few days' work in Faraday's laboratory, but following, we must not forget, years of patient and persistent experiment. It is doubtful whether any single event in all history has had a greater effect on the *material* aspects of human society than has this discovery. For on it are founded almost all our modern electrical developments.

Faraday has touched the life of every one of us. It is proper that we should remember him, and others like him, who strive to discover new facts of nature.



A ONE-MAN HAY HARVEST



When their task is finished, our soldier sons, as well as those who are now producing food for victory, will have an opportunity to operate their own farms with the best equipment modern design can offer.

A machine to help give them that chance has rewarded our search at Allis-Chalmers for a better system of making hay. It is ready and will be in production when war conditions permit—a new field baler that makes possible for the first time a one-man hay harvest without a pitchfork.

One man sitting on the tractor seat, master of his own hay crop! Rich protein and carotene formerly leached by the rain and bleached by the sun can be safe in the bale the hour hay is cured.

This machine forms a new type of weather-resistant rolled bale which will be handled mechanically from field to haymow. It is wrapped with ordinary twine, with the leaves sealed inside, protected from the elements by the bale's outer layer which serves as a "raincoat". It may be fed any of three simple ways: 1. Unrolled like a carpet. 2. Sliced open lengthwise. 3. Placed in feed rack whole, with twine removed.

Men who believe progress is yet young are planning equipment like this for even better living on the farm.

RUMELY LTD. - TORONTO ALLIS-CHALMERS

ALLIS-CHALMERS ONE-MAN BALER

Seeding and Planting the Victory Garden

by H. R. Murray

Department of Horticulture.

The area of soil for the first planting having been prepared the victory garden is now ready for seeding and planting. At this stage consult your plan and make notes on the kinds and varieties of vegetable to be sown and planted at this time, the number of rows of each kind and variety and the distance between rows. Sort out the seeds, take the line, yardstick and tools and get busy.

Using the yardstick, measure off the area for the first rows to be planted. Mark them with small stakes. Set the line tightly for the first row and taking this line as a guide, open up the first drill with the corner of the drawhoe (see cut). Handle the hoe in much the same manner as you handled the rake in raking and have complete control because if you have not complete control over the hoe the drill will be crooked. The soil must be hoed out, not just dragged out.

The depth of seeding should be approximately four times the diameter of the seed. Thus, if the individual seeds are 1/16" in diameter, the amount of soil covering them should be approximately 1/4" in thickness. Deeper planting may be practised in lighter soils and as the season advances, because the soil becomes dryer and warmer. It is usually safe to say that onions, radishes, spinach and lettuce (or any other comparatively small seed) should be covered to a depth of from 1/4" to 1/2" of soil, depending upon the type of soil and the time of year the seeding is done. Peas, on the other hand, should be covered to a depth of from 1" to $1\frac{1}{2}$ ". Many gardeners plant too deeply, so be careful in making the drills, and especially in covering.

Fortunately, the drill is never as deep as it looks because the shoulders made by the soil when it is turned out by the drawhoe, make it look deeper. Keep in mind that a trench is not needed for small seeds.

The seeds should be sown and covered just as soon after opening the drills as possible, otherwise the drills will dry out unnecessarily. In sowing the small seeds such as onions, radishes, spinach and lettuce, slit the top of

the packet and fold one to a "V". Hold the open end of the packet parallel with the drill and work the arm back and forth with a snappy motion, at the same time allowing the seeds to be thinly scattered at the bottom of the drill, about 4 to 6 seeds to the inch. If the seeds run out too quickly, thus lying too thickly in the drill, tilt the package backward. On the other hand, if they run out too slowly, thus lying too thinly in the drill, tilt the package forward. The larger seeds, such as peas and beans, may be scattered by hand at about two inches apart.

Immediately after seeding, using the back of the rake, fill the drill level with the surface of the soil, at the same time throwing out any large lumps or stones which were turned out by the hoe in making the drill.

Firm the soil with the rake rather than with the hoe, as the rake will leave unpacked soil between the teeth, thus forming a mulch.

Transplanting

Following the seeding of the hardy group, there are a few plants, such as cabbage, cauliflower and lettuce, which will have to be "transplanted" from seed flats or shifted from individual containers to the garden.

The moving of these plants should be done as soon as possible, as they are fairly hardy (belonging to the half-hardy group) and make the best growth under relatively cool conditions.

If the plants are being transplanted, that is, moved in such a way that their delicate root system is disturbed and injured, they will have to be handled more carefully than if they are merely being "shifted" that is, moved from an individual container such as a pot, plant cube or any such receptacle, with very little, if any, injury to their root system.

In transplanting, avoid undue wilting by planning to do the transplanting late in the afternoon, or in the early evening. This will give the newly transplanted plants a few hours of darkness to begin to "take hold" before being exposed to the hot rays of the sun or to drying winds.









THE OGILVIE FLOUR MILLS COMPANY LIMITED

In transplanting and in shifting, contact of the somewhat mutilated roots with a fine moist soil is necessary for a successful "take". Thus the soil for transplanting should be nearly as well prepared as it is for seeding.

If a large quantity of soil can be left on the roots of the plants at the time of moving, so much the better, as the check to the plant growth will then be much less.

In transplanting, use a trowel, spade or dibble. Measure off the rows and mark out the places for the individual plants. If the plants are being shifted from individual containers, or have a large amount of soil on their roots, use either the spade or trowel. Dig the holes so that each plant may be set a little deeper in its new location than it was before moving. Fill in the soil uniformly around the plant until the hole is about three-quarters full, at the same time supporting the plant with the left hand. Firm well and water thoroughly. Fill in the remainder of the soil without packing but leave a slight depression around the plant. This depression will facilitate future watering and, in the case of cabbage and cauliflower, the application of the corrosive sublimate solution which will be applied to control the root maggots. A paper collar set about 1" in the ground and projecting 1" above the ground will protect the young plants from being destroyed by cut worms.

Setting Out Small Plants

If the plants are small, or if they have had the soil pretty well knocked off their roots, probably a dibble (round pointed stick) will be the best transplanting implement. Insert the dibble in the ground with a turning or

twisting motion, withdrawing it before the twist has been completed. In this way the hole is made without the soil sticking to the dibble. Set the plant into the hole, slightly deeper than it was before. Supporting the plant with the left hand, insert the dibble at an angle of about 30 degrees, so that the point meets the root at the bottom of the hole. Then straighten the dibble so that the soil is firmly compressed against the roots. Withdraw the dibble, then water and fill in the hole. A good test for efficiency of transplanting is to take a small piece of the end of a leaf between the thumb and forefinger and give it a quick snap. If the leaf breaks the plant is well set but if the plant comes out it is not well set.

Avoid compressing the soil around the stem at the ground level as this may injure the tender stem and cause the plant to die.

In transplanting, do not prune or remove the outer leaves of the small seedling plant unless they are dead, because it is only through the combined leaf surface that the plant is able to make the materials necessary for replacing the roots lost in the transplanting process.

This completes the seeding of the first or hardy group, and the transplanting of the cauliflower and cabbage plants of the half-hardy group. This planting should have been completed by May 1st to May 10th, weather permitting. It is now time to prepare the soil and finish planting the vegetables of Group II, and carry on to Group III and so on. Consult your plan from time to time and follow through as the spring weather progresses, until the first seeding or planting of all groups is completed.

Seed Setting of Red Clover

by J. N. Bird

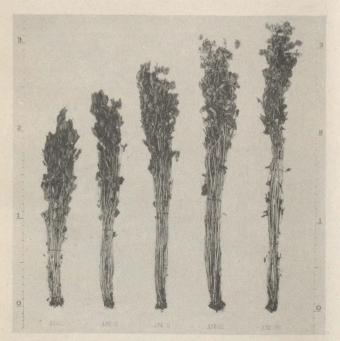
Department of Agronomy.

Although large quantities of red clover seed are used in the mixtures sown in Quebec, the province grows only a small fraction of its annual requirements of this seed. While weather conditions may sometimes interfere, it should be possible to bring about a considerable increase in our seed production by better management methods.

In the course of seed production studies with this crop at Macdonald College, an attempt was made to determine the trend of seed setting in heads collected throughout the summers over a five-year period. The normal blooming period of the crop was greatly extended by a succession of weekly cutting treatments made on a series of plots during the month of June which brought aftermath crops into bloom at successively later periods during the summer. In this way the crop was maintained in bloom from the middle of June until the end of August.

Every two days throughout this period heads were tagged when the florets were just beginning to open. This was done to indicate the beginning of the period over which the heads were in bloom. When the heads ripened they were collected and the seeds threshed out and counted. In this way the average number of seeds per head for each tagging date was obtained and the resulting figures used to determine the seasonal trend in seed setting.

The results showed a very definite seasonal trend. Starting out with a very moderate seed set of about 25 seeds per head with the first appearance of bloom in mid-June, there was a gradual decline until the end of June or early July as the period of bloom of the first growth



Samples of the first growth of red clover cut at weekly intervals during June. For best pollination and seed setting in the aftermath, the first crop must be cut not later than the middle of June.

came to an end. In the aftermath crops which followed, the trend was at first upward until a maximum seed setting of about 60 seeds per head was reached in late July or early August, after which there was a gradual decline again. Since red clover heads contain on the average about 100 florets, the percentage of seed set even at the maximum was not large. It appeared that the number of florets per head had little bearing upon the number of seeds formed.

Since practically no seed can be formed in this crop without the cross-pollination of the flower heads by bees, an important contribution to this study was made by the Entomology Department through counts of bumble-bees and honey bees visiting the seed plots at regular periods. Their results showed that the numbers of bumble-bee visitors followed a seasonal trend very similar to that of the seed setting, so much so in fact as to leave little room for doubt as to the special value of this bee in the pollination of the red clover crop. Honey bees, on the other hand, only visited the plots for a short period in late July or early August when bumble bees were most numerous.

From the study it was concluded that the best pollination and seed setting of red clover might be expected from a seed crop which reached full bloom during late July or early August. If the second (aftermath) crop is to reach full bloom at this time the first crop must be cut not later than the middle of June.

CHEMISTRY ... (Concluded from page 2)

It is not feasible to add vitamins to powdered milk simply by mixing cod liver oil with it, for the result is a sticky mass with a strong fishy flavour. Besides, when this is done every particle of milk powder becomes coated with a thin layer of oil, thus providing a large surface which on exposure to air rapidly loses its vitamin A. This difficulty was overcome by adding the oil before the milk was dried; thus, instead of having a large area of oil on the outer surface of each particle, each tiny fat globule was coated with a protecting coat of milk solids. It was found also that skim milk (which, contrary to general opinion is really an excellent food) could be used quite satisfactorily for this purpose.

The vitamin milk powder was prepared by adding a mixture of corn germ oil and ling cod liver oil, which is exceptionally high in vitamins A and D, to a small amount of skim milk. This mixture after being homogenized was mixed into the remainder of the milk and dried in standard spray drying equipment. The resulting powder looked exactly like whole milk powder and when mixed with water produced a milk with a rather pleasant nutty flavour. The fishy flavour of the oil completely disappeared and one heaping teaspoonful of the powder or a glass of the reconstituted milk each day would provide sufficient A and D for the requirements of the average adult.

Armed Forces Assistance to Nova Scotia Farmers

Under the Dominion-Provincial Farm Labour Policy 1,350 men from the Armed Forces contributed 33,000 work days in the handling of Nova Scotia's 1943 harvest. In return the farmers of the province paid \$95,000, including over \$51,000 for soldier labour, over \$38,000 for sailors from Deep Brook, and approximately \$5,000 for troops who went out by the day from the Transit camp at Windsor. Of the total approximately \$85,000 was paid for help in the apple district and \$10,000 for general farming mostly in the central part of the province. In addition to the men from the armed forces there was about 190 civilian apple pickers to whom the Department of Agriculture paid one-way transportation between their homes and the apple areas.

The soldier-sailor farm labour policy became effective the middle of August and continued until the middle of December with a score or so of men continuing work in the processing and packing plants till the end of January.

The rate of pay for the men from the armed forces was \$3 a day and their keep for days that were worked, the farmers paying this amount and the men receiving the difference between their service pay and the amount paid by the farmer. The rate of harvesting pay for soldier-sailor workers varied across Canada, being \$3 a day in Quebec and the Maritimes, \$3.50 in Ontario and \$4 west of Port Arthur. The number of harvest workers from the armed forces in Nova Scotia was the highest in Canada being about twice the number in Manitoba, which stood second highest.

Honorable John A. McDonald, Nova Scotia Minister of Agriculture, in expressing appreciation of the harvesting work done by the sailors and soldiers, said the cooperation of Honorable J. L. Ralston and Honorable Angus L. MacDonald and the men of the Armed Forces had meant the saving of the 1943 apple crop.

Indications for Fair Bloom in Annapolis Valley

Following observations made last fall and also very recently the indications are there will be a fair bloom on the Valley fruit trees this spring, states M. E. Neary, Acting Provincial Entomologist. The trees seem to have wintered well and did not have to face as much cold weather as in the previous winter. Last fall fruit buds showed up fairly strong.

"Heredity," the little boy wrote, "means that if your father didn't have any children, and your grandfather didn't have any children, you won't have any children."

"Now be sure and write plain on both of the bottles which is for my wife and which is for the cow," the old farmer told the druggist, who was filling prescriptions for him.

"That's a registered Jersey cow, and I don't want nothin' to happen to her."

CONTINUES TO PERFORM NEW WONDERS



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GO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Co-operative Abattoir in Operation 30 Years

Fédérée Plant at Princeville Adds Equipment to Meet New Conditions

Serving an area which includes over twenty local co-operatives the Prince-ville Co-operative Abattoir does a large and varied business in the slaughtering and processing of meats. Farmers bring livestock in from a radius of nearly forty miles to build up a business volume which last year exceeded a million and a half dollars. At the same time the farmers meet some of their feed requirements by buying from the co-operative.

Emile Belanger, the present manager, has seen most of the changes that have taken place in nearly thirty years of operation. He was appointed to the position he still holds when the plant was bought in November 1916 by La Société Co-operative Agricole des Fromageurs de Québec. The co-operative

Abattoir has been organized by a group of local farmers two years before. The original building was erected in 1915 but has since been considerably enlarged and now measures 250 by 60 feet, part of it two stories high.

In 1917 the co-operative added the selling of seed and feed grain to its slaughtering and piggery business. In 1922 the name of the organization was changed to the Coopérative Fédérée de Québec.

Much new machinery and many labour-saving devices have been added in the last few years and a high standard of quality and cleanliness has always been maintained. In 1942 Federal Government inspection was secured. Prime steam lard has been manufactured since October of that year. Early in 1943 the curing cellar capacity was increased until now it is possible to cure over 21,000 pounds at a time. All curing is done in casks. A new silent cutter in the sausage room has a capacity of 200 pounds in ten minutes, and the grinder handles 2500 pounds an hour. Cooked hams, smoked meats and lard are all handled in the sausage department. Two smoke houses have a combined capacity of 10,000 pounds.

The Abattoir employs 36 people—six of these being women since the labour shortage has been serious. The women work in the bacon slicing department, in frankfurter and sausage packing, and help in the manufacture of bologna, fresh sausage, smoked meat, etc.

Plans are being made to pack fancy meat in attractive packages in the future when the competition of post-war trade becomes keen enough to warrant such practices.



The Co-operative Fédérée Abattoir at Princeville.

Superintendent Ed. Belanger, Hog Grader Boulanger and the Government Inspector have offices in the plant, while the general offices handle not only the clerical details of the abattoir but also the many other activities of the Co-operative in this area which are under the direction of Manager Emile Belanger.

F.D.R. Urges Use of Co-ops

In a message to the Washington conference called by The Co-operative League on international co-operative reconstruction, President Roosevelt asserted that post-war problems of relief and rehabilitation should be based on the same principles observed by the twenty-eight weavers of Rochdale.

The co-operative movement, the President said, is "one of the appropriate instruments" to be used in this post-war task. He added:

"The weavers of Rochdale who founded modern co-operative enterprise balanced independence with interdependence, self-interest with good will, and action with foresight. Any handling of the problem of relief and rehabilitation of the victims of Axis aggression must be based upon these same considerations."

"The co-operative movement, which belongs to no one nation but has its roots in the traditions of all democratic peoples, is therefore one of the appropriate instruments to be used in this task."

—Co-op News.

Market Comments

Suspension of meat rationing was the news of the past month. Increased supplies together with a scarcity of transportation to move surpluses overseas raised storage holdings to a volume that permitted rationing to be suspended.

Suspension of rationing of meat may be temporary or permanent depending on supplies. The volume of output becomes the important factor to watch. In the first 10 weeks of the year the number of meat animals slaughtered under inspection was much larger than in the same period of 1943. In that time cattle were up 41 per cent in number, calves 11, sheep and lambs 36 and hogs 78 per cent over the marketings of the similar period of the previous year. Compared with two years ago the contrast is not so great.

The increase in numbers of live stock being fed and marketed has used up much of the grain surplus. It is claimed that more wheat is being fed to live stock this year in both Canada and the United States than is being used for human food. From August first, 1943, to March 9, 1944, the quantity of grain exported to the United States was in round figures 114,000,000 bushels of wheat, 27,000,000 bushels of oats and 16,000,000 bushels of barley. This trade is continuing at a rapid rate. The grain surplus is decreasing. It has not taken farmers very long to transform a grain surplus into a meat surplus.

Fruit and vegetables continue scarce. In March 1941 B.C. McIntosh apples were \$1.95 per box and Quebec No. 1 potatoes 55 cents per 75 lb. bag. Present prices record quite a change from three years ago in these products.

TITL .	7	1 1	n .	
Tre	nd	ot	PTI	CAS

	March	Feb.	March
	1943	1944	1944
	\$	\$	\$
LIVE STOCK:			
Steers, good, per cwt	12.75	12.12	12.35
Cows, good, per cwt		8.43	8.85
Cows, common, per cwt		6.68	6.70
Canners and cutters,			
per cwt.	6.95	5.48	5.60
Veal, good and choice,			
per cwt.	15.66	15.60	15.85
Veal, common, per cwt		14.00	14.15
Lambs, good, per cwt			
Lambs, common, per cwt		10.00	9.42
Bacon hogs, dressed, B.1,			
per cwt.		17.15	17.15
ANIMAL PRODUCTS			
Butter, per 1b.	0.35	0.35	0.35
Cheese, per lb.		0.20	0.21
Eggs, Grade A large,			
per doz.	0.35	0.351/2	0.351/2
Chickens, live, 5 lb. plus,			12
per lb.	0.31	0.281/2	0.293/4
Chickens, dressed, milk fed,	A	-	/4
per lb.		0.36	0.363/4
FRUITS AND VEGETABL	ES:		/4
Apples, B.C. McIntosh,			
extra fancy, per box 2.	75-3.00	3.80	
B.C. Delicious, per box			3.80-3.95
Potatoes, Quebec No. 1,			
3	10.50	11.94	11.72
per 75 lb. bag	1.80	1.80-1.85	1.85-1.90
FEED:			
Bran, per ton	29.00	29.00	29.00



FARMS OR ACREAGE WANTED

The Director, The Veterans' Land Act, is interested in obtaining particulars of farms varying in size from 40-100 acres or more, carrying productive soil and equipped with habitable buildings and satisfactory water supply, favorably located in regard to markets, schools and 'social services; also acreage suitable located for small holdings, either with or without buildings, adjacent to or adjoining cities, towns or villages in Quebec, where there are reasonable prospects for employment in industry, commerce or agriculture.

Lands of the above type are required for the re-establishment of veterans of the Canadian Active Service Forces and the Director is prepared to purchase outright for cash such lands as are found suitable for this purpose.

For the guidance of all owners of land who may be interested in this advertisement the following quotation from The Veterans' Land Act, 1942, is important:—

"No person, firm or corporation shall be entitled to charge or to collect as against or from any other person, firm or corporation any fee or commission or advance of price for services rendered in the sale of any land made to the Director, whether for the finding or introducing of a buyer or otherwise."

Address all replies to

S. BOILY,

District Superintendent,

The Veterans' Land Act,

Olivier Building, Sherbrooke, P.Q.



Directors Attend — or Else

Directors of the Moose Jaw (Saskatchewan) Cooperative Society, Ltd. don't have to bring excuses from their wives if they miss a board meeting—but they'd better have an alibi ready for their electors. Under a resolution adopted 6 years ago, the first piece of information in the notice of the annual meeting of shareholders is a list of the directors and the number of board meetings, if any, that each has missed.

"Go to the Ant ----"

by W. E. Whitehead Department of Entomology.



Despite the Biblical injunction "Go to the ant - and be wise", we find the ant coming to us and it is not to consider our ways as the insect seems to know them already. It knows the way to the pantry shelf, especially if some sweet food is to be found there; it may occasionally set up housekeeping in a pot in which a house plant is growing, while in the garden, one frequently finds a colony of ants disfiguring the lawn, or undermining some plants in the flower garden. It is not the intention here to consider ants in the garden, other than to say that their presence usually indicates that there are some plant lice within reasonable distance. These insects produce a sweet, sticky substance to which ants are very partial, so that by removing the plant lice, we usually get rid of the ants. Our local ants do not, as a rule, injure plants by feeding upon them.

During the past year or two, many inquiries have reached Macdonald College, especially during spring and early summer, as to how to get rid of ants in the house, and it is the purpose of this note to outline the best means available. Ants that enter houses come from a colony, or nest, nearby; it may be in part of the structure itself, or in the ground outside, but it is sometimes difficult to locate the nest or find the place where the insects enter and leave the house. If the nest is in some inaccessible part of the building as may be the case with the large, black carpenter ant, nothing much can be done about it, but if it is located in the soil, we can usually dispose of it without much difficulty. Ants are attracted into a house by food, especially sweetened food, and it is sometimes difficult to put this out of their reach. They should be attacked and eliminated as soon as detected as their presence means waste, not because of the amount of food they eat, but because we do not fancy food that has been overrun by these insects so dispose of it by some other means.

The control of ants may be by either (1) destroying the colony, or (2) poisoning the ants while away from the colony. A small ant's nest may sometimes be destroyed by an application of boiling water, but for a well-established colony, other means of control are usually necessary. The use of carbon bisulphide is recommended, although it should be remembered that the gas is inflammable. For a small colony, punch a hole in the nest, several inches deep; for larger colonies additional holes are necessary

depending on their size. Into each hole pour a tablespoonful of carbon bisulphide, close the hole and press the soil firm with the foot.

Ants in the house may be poisoned in two ways. The first is by liberally sprinkling sodium fluoride about the places frequented by the insects. This is a fine, white powder which may be obtained from the larger drug stores; it is a poison and should be treated accordingly. This insecticide is usually more satisfactory for use against the little red ant (Pharoah's ant) that is often troublesome in the house. The second method of control is by the use of a poisoned bait. One such is prepared in the following proportions: sugar 8 oz., honey 1/2 oz., hot water 1 pint, sodium arsenate 2 grams or sodium arsenite 1 gram. Another bait is prepared by dissolving 10 grains of sodium arsenite and 6 oz. sugar in a pint of hot water. Substitution of syrup for the sugar is satisfactory. The bait is placed in shallow pans or plates which are placed where they will be accessible to the insects. Sometimes a piece of sponge or crust of bread is placed on the plate to absorb some of the liquid and on which the ants may rest while feeding. The adult insects not only relish the bait, but feed their brood with it. These baits are poisonous; they should be kept out of reach of children and domestic animals and should be disposed of when they have served their purpose.

An Interesting Study

by J. E. Lattimer Department of Economics.

The last few years have shown that a large amount of food may be used when all available workers are busy and being paid good wages. The purchasing power of the people has a striking influence on the farming business. This purchasing power varies from one district to another. The census report of 1941 records the annual earnings of wage earners in the pre-census year by counties. In the province of Quebec the variation is very great. For instance, there were 4 counties in the province where 305,817 workers received over \$1,000 per year while there were 12 counties where 28,226 wage earners averaged only \$449 per year.

In the 4 counties where wage-earners averaged over \$1,000 per year one out of 4 was a wage earner. In the 12 counties where earnings were \$449 one out of 11 was a wage earner. Workers are compelled to move to centres where wages are higher in order to be able to get a job.

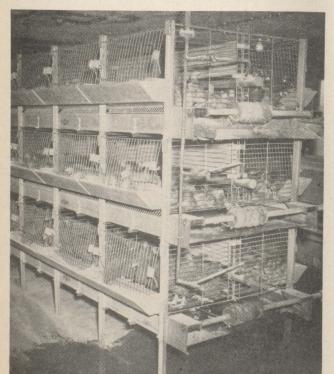
The shifts in population due to the growth of industries in different sections changes market conditions. Some sections gain at the expense of others. This influences prices of farm products in different sections. This is specially noticeable in the price of fluid milk which cannot be transported long distances. In a dairy province like Quebec this is an important point.

Variation in prices in different parts of the province is a subject that is being studied now at Macdonald College.



Applied Research and its Economic Value

by W. A. Maw Department of Poultry Husbandry.



Many problems of immediate importance face the poultry industry. Much thought is being directed to the supply of and the maintenance of quality in the available feeds essential to efficient growth and reproduction. General world needs for specific products in fields other than live stock production have brought on further consideration of substitutes and supplements in our general feeding schedules.

Much has been done to relieve shortages of certain feeds by supplementation. The use of pasture forage during the growing season is at present receiving serious study. Relatively little definite work with poultry has been done to date. Sufficient has been done, however, to show that appreciable savings in the amount of feed consumed during growth, as well as possible savings in the protein feeds, such as milk and meat, can be made where good succulent pasture is provided.

Studies are projected for the use of clovers and grasses, as well as cereals, for immediate and permanent pasturage for growing stock. Succulent pastures are likened unto a supply of skimmilk for stimulation in growth and economic results on the basis of feed-gain ratios.

(Continued on page 21)



DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

A Summary of Departmental Policies

It has occurred to us that our readers would be interested in a detailed summary of the activities and policies of the different branches of the Provincial Department of Agriculture so that they could know exactly what is offered in the way of services and financial assistance toward good farming in Quebec. Therefore, we have prepared an outline of the activities of the various activities carried on by the different divisions of the Department. It is impossible to print all of this in one issue of the Journal so we will give you, monthly, as much detailed information as we have space for.

Field Husbandry Branch— Andre Auger, Chief

This Branch offers the following services, bonuses and premiums:

Limestone: To help with the purchase of limestone for application to acid soils, grants for transportation, whether by rail or by truck, up to \$1.50 per ton, but the grant will not be paid on more than 50 tons for any one farm in any year. The limestone must be at least 85% CaCO₃ and be finely ground. Claims for the grant must be made through the local agronome and must be accompanied by the original bill from the seller. When shipment is by railway a permit must be obtained before the order is placed.

Marl: Up to 50¢ per cubic yard will be paid toward transportation costs on marl containing at least 75% CaCO₃; a maximum of 10 tons will be bonused per acre. The grant will be paid on receipt of an official form approved by the agronome.

Stone removal: Assistance will be given toward blasting out large field stones by allowing a grant according to the number of feet of drilling required at the rate of 25¢ per foot. Request for this grant is to be made to the agronome, giving him at the same time some idea of the amount of drilling required. At least 20 feet of drilling must be planned and the premium is paid direct to the operator of the drill.

Drainage tile: Freight or trucking charges on drainage tiles will be paid up to 75,000 pounds of tile per farm. The tiles must be used for agricultural purposes only and claims for the grant must be accompanied by the bill of lading or trucker's receipt, a permit from the agronome and the seller's receipted bill.

Farm Competition: Farmers who enter the Better Farming Competition receive a grant of \$20.00 per year

for each of the five years the competition lasts. A further sum of \$1,000.00 is divided among the competitors at the end of the five year period. In addition, a grant of \$25.00 is available to any competitor who installs a manure pit, a root cellar or a silo. To obtain these grants the farm owner must follow the suggestions made by the Department technicians as concerns farming plan, cropping plan, milking records and bookkeeping. No farm which does not score at least 65% in the final judging will be eligible for a grant. Plans for the building of the items mentioned above must be approved and recommended by the local agronome.

Cost Records: Any farmer who agrees to keep accurate records for five years, from which his cost of production can be calculated, is eligible for a grant of \$50.00 per year. Only a very few of these grants will be made each year.

Aid to Farmers' Sons: A grant of \$300.00 will be made over a three year period, to a farmer who wants to set his son up in farming. The candidate must be of a type to make a good farmer, be at least 19 years old and be really in need of financial help. No grant will be made for anyone who has been established on his own farm more than two years before the request for assistance was made. The new farm (on a patented lot) must have at least a house and a barn or, if these are not built, the father must agree to build them. There must be at least 10 acres under cultivation on the newly-established farm and the young owner must be resident on his farm before the second payment of the grant will be made. There will be no grant to a farmer's son who takes over a part of his father's farm.

Land Clearing: To encourage larger farms, a grant of \$10.00 per acre will be made for land clearing, removal of rocks, draining and ploughing, up to 3 acres per farmer. Farms which consist of more than 50 acres under cultivation are not eligible. The farmer must be a member of an agricultural society, must follow the recommendations of the agronome as to choice of land to be cleared and methods to be used.

Seed Production Centres: Through these centres seed of improved varieties of farm crops are offered at favourable prices. Seed may also be borrowed, to be returned to the centre after harvest.

Drainage ditches: Grants are made to municipalities who request improvement in smaller drainage ditches. In farming districts, the grant is 40% of the cost, and up to 75% of the cost in colonization areas.

Larger drainage projects: When a considerable amount of drainage is to be done, the Department will make surveys and draw plans; will furnish steam shovels and supply an operator and an oiler. A tractor can be rented to spread the earth at the rate of not less than \$1.50 per hour. These larger projects are arranged through the municipal councils who assume responsibility for securing all releases, etc., from farmers whose land will be affected by the new drainage. The municipality undertakes to maintain the new drainage system in good condition, to pay all costs except those assumed by the Department, and to rent the tractor for spreading the soil.

Erosion Control: If a large amount of terracing work is to be done, interested farmers may apply to the Department for the use of a tractor, a grader, or a Briscoe ditcher, provided that a group application is made and that not more than two days' work is required on any one farm. The cost is \$2.00 per hour except for the ditcher which costs \$5.00 per arpent along the watercourse. Written request for the use of the machinery must be made to the regional agronome, and the programme should provide for at least 45 days' work. A deposit must be made before the work will be started. The Department pays for the gasoline and oil, and transportation charges on the machinery.

Animal Husbandry Branch— Raoul Dionne, Chief

Dairy Cattle Division

Purchase premiums for bulls: The following grants are paid to farmers to assist them in buying high quality bulls for their dairy herds. \$10.00 toward the purchase price of a bull less than 8 months old, qualified on both sides. \$25.00 for a bull graded AA or XX; \$15.00 for one graded A or X. For beef breeds, if less than 10 months old and scoring 85%, \$10.00. If over 10 months old and scoring 75%, \$15.00. Over 16 months old and scoring 75%, \$25.00. To benefit, the buyer must be a farmer and must not have received a purchase premium within 30 months.

Milking records: To encourage the keeping of accurate milking records the Department furnishes all the necessary forms, tests the milk samples and prepares monthly and annual reports on the production of every cow on test. The farmer is required to weigh the milk morning and evening, send in a sample of milk from every cow on test every month, and pay an annual fee of \$2.00. This control work is under the direct supervision of the local agronome.

Help for colonization districts: Purebred bulls are loaned to settlers, and the costs are borne equally by the Departments of Agriculture and of Colonization. A bull is placed in any district where there are a sufficient number of cows to justify its presence and where a suitable man can be found to look after it. Requests for a bull are made through the local and the regional agronome.

In special cases only, the Department will help with the purchase of grade heifers. No colonist may obtain more than two heifers, for which he pays \$5.00 each, the Departments of Agriculture and Colonization sharing the rest of the cost and pay transportation charges. Only a few heifers are available each year.

Young Farmers' Clubs: The Department shares with the Federal Department of Agriculture the cost of prizes offered for club members. Authorization for the organization of a club must be obtained from both Quebec and Ottawa. Each club may have up to 15 members, aged between 12 and 21 years. Club members are required to attend club meetings and to raise at least one calf each. These clubs come under the direct supervision of the Federal authorities, but there is a close co-operation between them and the officers of the Provincial organization.

Breeders' Clubs: A grant of \$20.00 is made for each member of over one year's standing. Each member must buy at least two purebred heifers or three grade heifers, or build a bull pen and exercise yard. These clubs are supervised by the agronome and the field man.

Livestock Breeders' Societies: A grant of \$2.00 per member in good standing is made each year on receipt of a report of the Society's activities during the year.

Poultry Division

Poultry Clubs: These organizations are aided by a grant of \$25.00 the first year on proof of the construction of the necessary poultry buildings. The second year a grant of \$20.00 is made provided reports of the previous year's operations are received and all conditions have been complied with. Poultry field men visit the clubs and give any help needed.

These clubs are intended to encourage poultry raising and membership is limited to those who do not already possess a poultry house or brooders. A three year contract is entered into by each member under which he agrees to buy 300 certified chicks the first year and raise 200 chicks each of the other two years. He must build a brooder house with a capacity of 400 chickens and a poultry house for 100 hens according to the Department's plans and specifications. He must winter at least 100 purebred hens, keep accurate records of his operations and send monthly reports to Quebec. He must also build a portable shelter at least 10' x 12' in size.

Chanteclerc Breeders' Clubs: Brooder stoves are furnished to members who have none, and the Department pays half the purchase price of 300 chicks, provides bulletins and plans the first year and sends field men for periodic visits. Each member must buy 300 Chanteclerc chicks the first year and raise 200 chicks the other two years of the contract. He must put up the necessary buildings if he has none already and provide a poultry house with a capactiy of 100 hens. He must also winter at least 100 purebred hens and send in monthly reports of his operations.

OPPORTUNITY KNOCKS SALESMAN CALLS....



WHEN THE VICTORY LOAN

ASK HIM TO SHOW YOU THIS LETTER



YOU CAN USE IT TO BUY MORE VICTORY BONDS through any bank on PAYMENTS CONVENIENT TO YOU

You can buy Victory Bonds with cash which you have saved . . . and you can buy more bonds with money as you get it, on convenient deferred payments. Every Victory Loan salesman has printed copies of the deferred payment letter above. (You can also get this form letter at any bank.) All you do is write in the name of your bank and the amount of the bonds you wish to buy and sign it.

You make a first payment of at least 10% of the amount of the bonds you buy and pay the balance when it is convenient for you to do so, within the next six months. Bonds earn 3% for you and this income pays the interest on the loan during this period. Be sure to buy Victory Bonds on this plan as well as for cash.

BUY UCTORY BONDS

Turkey Breeders' Clubs: Farmers who do not already keep turkeys may sign a two-year contract under which the Department furnishes stoves when needed and pays half the cost of 100 turkey chicks the first year, (up to \$20.00), furnishes plans and bulletins and arranges for visits by the field man. Each member agrees to buy 100 day-old turkey chicks the first year and to raise an equal number himself the second. He must also build the necessary houses and make monthly reports.

Rabbit Breeders' Clubs: Only those who do not already raise rabbits can benefit under this plan, nor can sons or daughters of farmers who raise rabbits. A one-year contract is signed under which the Department pays half the cost of a trio of rabbits (maximum contribution \$5.00). Each member must set up at least 4 hutches, buy a trio of rabbits, keep records and report to Quebec monthly.

Co-Operative Hatcheries: One quarter of the cost of new incubators is paid by the Department and a premium of 50ϕ is paid for every R.O.P. cock bought. When a member's flock is examined by an inspector and the selected birds are banded, the farmer pays $1\frac{1}{2}\phi$ per bird banded. The hatchery receives a grant for blood testing amounting to $1\frac{1}{2}\phi$ per test when the rapid test is used, 2ϕ for the slow test. Private hatcheries are not entitled to the incubator grant and their customers do not receive the cockerel grant. The co-operative hatcheries are required to follow the regulations as regards certification, keep accurate accounting records and report on their operations to Quebec.

Livestock Meetings

March was a month of meetings for the livestock breeders' associations in Quebec. All during the week of March 6th annual gatherings of all individual societies were held in Montreal, climaxed by the annual meeting of the Quebec Livestock Breeders' Association on Friday. The associations' members heard reports of the year's operations and discussed plans and policies for the future.

Chief speakers at the closing meetings were J. G. Gardiner, Premier Godbout, E. S. Archibald and J. M. Veilleux. Mr. Gardiner told his listeners that in 1943 Canadian farmers had produced more livestock than in any previous year, and said that there were over a million more cattle in Canada than three or four years ago. Hog population has also increased and hog marketings are running 100,000 more a week than in 1942. He emphasized the necessity of maintaining quality as well as quantity in export products if the present large markets, particularly in Britain, were to be kept after the war. "If Canadian farmers can organize their production so as to meet the demands of their markets, these markets can be held," he stated. "Our problem in relation to food products is not going to be one of scarcity, but one of friendly markets." Speak-

ing of the suspension of meat rationing, he pointed out that it had been made possible by the great volume of hog production and the increase in cattle production. It takes about two years for any appreciable increase in cattle production to make itself felt, and the expansion begun two years ago in this line is just beginning to be apparent.

Premier Godbout lauded the work of the breed organizations through which real progress in livestock breeding in Quebec is being made. He announced plans for a widespread project of land drainage, improvement and fertilization to be undertaken as soon as possible. He also expressed appreciation of the co-operative spirit which existed between officials of the Federal and Provincial Departments.

Dr. Archibald congratulated dairy farmers on the increase in milk production they have been able to make in spite of difficulties. He felt the time was ripe for cooperation between the three major breeds in Quebec, Ayrshires, Holsteins and Jerseys, in working out improvements in breeding and management. Artificial insemination, he thought, could be a big factor in improving the general quality of our stock.

J. F. Desmarais is the new president of the parent association; the vice-president is J. T. Beaudoin. L. C. Roy continues as secretary.

Plenty of Limestone

There will be no scarcity of limestone in Quebec this year, for the Department has taken steps to see that production is stepped up. Last year, farmers' orders for limestone totalled 200,000 tons, but only 135,000 tons could be supplied. Quarries were short-handed and did not have the equipment needed to produce all the limestone needed. But new machinery has been purchased and is ready to supply all demands during the coming season.

Use of limestone by Quebec farmers is steadily on the increase as the figures below show:

1932 — 31,700 tons used 1940 — 49,483 " 1942 — 150,000 " 1943 — 135,000 " 1944 — 200,000 " (estimated)

Here are a few interesting facts concerning rural electrification in Quebec as compared with Ontario. Figures are for 1940.

Number of farms with	Quebec	Ontario
electricity installed	26,528	60,358
Energy used (kilowatt hours)	9,515,398	96,125,498
Average cost per		
kilowatt hour	0.561	0.258

Agriculture in the Province of Quebec

by Premier Godbout (From an address to the Canadian Federation of Agriculture)

Quebec City was the birthplace of Canadian Agriculture, for there, in 1617, on a strip of land a stone's throw from the spot where the Chateau Frontenac now stands, Louis Hebert started clearing a plot of land containing about 10 arpents, or 8 acres, which had been granted to him by the King of France.

From 1608, when Quebec was founded, until 1617, no attempt was made to cultivate the soil. In fact, the sponsors of the new colony would not allow anyone to clear land for farming—their interest lay entirely in the fur trade and they feared that settlers would drive away the furbearing animals. For this reason the birth of agriculture in Canada was delayed for nine years.

It really was pioneer work in those day and progress was necessarily slow: there were no farm implements, no farm animals. But Louis Hebert, his son Guillaume and, after 1621, his son-in-law Guillaume Couillard did the best they could with such simple hand tools as axes, hoes and sickles.

The first plow and draft animals were used by Couillard on April 27th, 1627. Louis Hebert did not witness this epoch-making event: he died on January 25th, three months before. But this father of agriculture in Canada is not forgotten, at least in Quebec, and in his honour, and to commemorate the third centenary of the first crop, however small, ever grown in this country (with the possible exception of the early French settlements in Acadia, where Hebert himself had sown wheat and planted grape vines as early as 1610), a monument was erected on the site of his farm in 1918.

This early interest in agriculture has been maintained in Quebec where it is recognized as the most essential of all industries and the true corner stone of the whole Canadian economic structure. The Government spares no effort to foster agricultural progress, convinced that if farmers are prosperous the whole province will be prosperous.

But this is not simply a provincial interest; we in Quebec realize that the interests of our farmers are closely bound up with those of farmers in other provinces, and we welcome every opportunity to meet with other Canadian agriculturists whenever possible to discuss common problems on a nation-wide basis.

Some of Quebec's most powerful agricultural societies, such as the Quebec Farmers' Union, or U.C.C., the Co-Operative Federee, Breeders' Associations, Dairy Industry Society, etc., represent Quebec in the Canadian Federation of Agriculture. Much good will derive from this partnership both for Quebec and for Canada.

Our War Effort

At the very outset of World War II out farmers accepted, with characteristic patriotism and determination, the challenge to increase production of food for Canada

and her fighting forces, to supply the Allied Nations to the utmost of their ability, and to support the cause of liberty. Despite scarcity of labour and farm implements, despite ever-increasing difficulties, the progress made since 1939 has been steady and most satisfactory. Even in 1943, under adverse weather conditions, production approached the peak reached in 1942. Results might have been quite different had not the farming population mad a determined effort to beat their previous year's record.

The Dominion-Provincial conference held early in January, 1943, set increased objectives for most commodities, especially animal products and essential crops. Quebec farmers responded by increasing the area planted to field crops by 150,000 acres, which is 2.3%. This figure may not appear impressive when compared with the total Canadian field crop acreage: nonetheless it is a remarkable achievement when one considers the handicaps under which it was accomplished. And without in any way attempting to detract from the efforts of other provinces, we may say that Quebec is the only province in which all field crops covered a larger area in 1943. Similar or even better results were achieved in many other lines of production.

Dairy Products Increased

The supply of dairy products has kept step with other lines. As an indirect effect of war conditions, raw milk consumption has greatly increased and now represents 23% of the total production. Notwithstanding this greater demand for raw milk, butter production in the first eleven months of 1943 advanced 19% over the corresponding period in 1942 and we produced fourteen million pounds of butter more than last year. Moreover, quality is also on the upgrade and is not falling with the increased volume. 94.27% of our butter graded No. 1, giving Quebec first place for quality.

This increase in butter production was accomplished by a drop in cheese production. In 1942 we produced 62 million pounds of cheese: in 1943, 46 million pounds. Yet this is a huge increase over pre-war production. Quebec's cheese production was 35 million pounds in 1939. The 1942 production was an increase of 77%.

Other Crops

As far as fibre flax is concerned, Quebec still leads. Last year flax was grown on 30,000 acres, which is three-quarters of all Canadian acreage for this crop. This is a remarkable figure when it is remembered that in 1939 our total acreage was 4,000 acres. The increase is 650%. In 1940 we had only one flax-processing mill: today there are 22 mills, owned and operated by the growers themselves as co-operatives.

Fruit and vegetable crops suffered most from bad weather in 1943 — yield was smaller and quality was seriously impaired. In this connection the excellent work

of the Cercles Fermieres and the Women's Institutes deserves special mention. These women had been urged to have larger gardens and to grow more vegetables. Increases of 50% were not uncommon and had the weather been better an impressive volume of vegetables would have been available for home consumption, for canning and for processing. Over 25,000 Victory Gardens, organized in various cities, have materially helped to raise the production to the level of the demand.

The campaign for increased production was directed by a central committee. All farmers enthusiastically supported the Government in its request for more crops, and 920 local Intensive Production Committees composed of farmers, clergymen, mayors, business men and others, all working closely together, were set up in rural localities to plan production for the area. The heartiest collaboration was met everywhere.

The contribution of Quebec farmers has not, however, been limited to food production. They subscribed over fifteen million dollars to the Fifth Victory Loan, a magnificent contribution for which they deserve hearty congratulations.

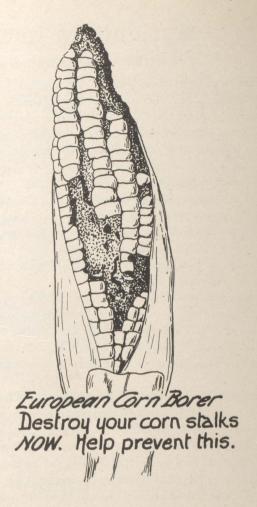
Special Crops

Mixed farming, which is the rule on most Quebec farms, has proved its soundness and all-round value in these trying times. This policy need not be modified in its general lines. We, however, stress the importance of more diversification through the introduction of special crops, and sugar beets is the most recently introduced of these new crops.

After years of satisfactory tests which showed consistently good yields and high sugar content from beets grown on our good soil, it has been decided to start sugar beet culture on a large scale in 1944 and production contracts for 10,000 acres are now being signed by farmers. The refinery which is being built at St. Hilaire will be ready to process at least 100,000 tons of beets next fall.

The facts given will show that Quebec farmers have gallantly held the Farm Front. The men who stayed on the farm, with the help of women and children have willingly accepted many sacrifices in order to extract from the soil the maximum of essential foods. An almost impossible task has been performed by the soldier of the soil in Quebec (and, of course, in other provinces as well) and to them the country owes a deep debt of gratitude.

The first course ever given in Canada in the sexing of day-old chicks has recently been completed at Ste. Anne de la Pocatiere. About twenty members of co-operative hatcheries attended the courses which lasted four weeks and are now qualified to determine whether a day-old chick is a male or a female. Instructors were P. E. Bernier, G. Vincent and J. R. Brassard.



Wool Bonus will Continue

The four-cent a pound bonus on clean wool will be continued during the present season. The bonus is paid for unwashed wool of all categories provided the fleeces are clean and free from waste matter. Two conditions must be observed: the fleece must be marketed through channels approved by the Canadian Wool Commission and must be tied with paper twine, not string, cord or binder twine.

In 1943 over 50,000 pounds of wool lost the bonus because it did not meet the conditions imposed, but the bonus, which is paid jointly by the Federal and Provincial Departments of Agriculture, was paid on 81,893 pounds of wool.

Ontario has 20,000 miles of electric lines in the rural districts alone, whereas in Quebec, city and country lines are not more than 15,000 miles. In Ontario, a line will be put in if there are at least two farms per mile: in Quebec there must be at least ten prospective customers per mile before a line will be installed

Fertilizers for the Home Garden

The best all round fertilizer for the garden, under ordinary conditions, is manure supplemented with commercial fertilizer.

The value of manure is threefold. It supplies plant food to the soil, it adds organic matter, and beneficial micro-organisms. Organic matter is especially important, if the soil is generally poor. This is likely to be the case if the garden is located in a crowded backyard, or if the soil is made up of material which has been brought in as "fill" from a building project (such as from the excavation of a foundation), or if the soil is of a very sandy nature. Under such conditions, well rotted manure should be used if it can be obtained.

Commercial fertilizers, on the other hand, supply only plant foods, but the plant foods when supplied by commercial fertilizers, are well balanced and in a form more readily available to the growing plants, than if they are supplied by manure. The availability of plant foods is especially important where plants are grown under the cool conditions of early spring, hence commercial fertilizers should be used always with early crops

However, the chief advantage of commercial fertilizers to the average victory gardener is in their convenience of purchase, and their facility of handling.

Where fresh sod has been broken within the last year or so, commercial fertilizers alone will give excellent results, as the decaying sod will furnish organic matter in abundance.

The commercial fertilizers are made up usually of nitrogen (N), phosphorus (P) and potash (K) alone, or these three elements in a suitable combination, and known as complete fertilizers.

Nitrogenous fertilizers stimulate the growth of roots, stems and foliage and therefore they are of greatest benefit to root crops, such as beets, carrots, parsnips and turnips, and also to crops producing stems, such as asparagus, celery and rhubarb, and finally to leafy crops such as cabbage, lettuce and spinach. The most commonly used nitrogenous fertilizer is nitrate of soda and this is quite often applied as a "side dressing" to accelerate the growth of plants which seem to be "slowing up". Crops growing on sandy soil require fairly heavy applications of nitrogenous fertilizers in addition to manure.

Phosphatic fertilizers have the opposite effect to that of nitrogenous fertilizers, as they tend to check rapid growth, while at the same time they encourage the early formation of flowers, fruits and seeds. They are inexpensive and should be applied liberally to all soils, especially if the soils come in the so-called "heavy" class, and regardless as to whether or not large quantities of manure

have been applied. Superphosphate (20%) is the cheapest and the most common form of phosphorus used by commercial vegetable growers, but many of the older gardeners still prefer to use steamed bone meal, or bone flour, especially if flowers are being grown.

Potash fertilizers are of benefit to all plants at all stages of growth. Sandy soils are usually poor in potash and for that reason they require heavier applications of these fertilizers. They are especially valuable to root crops, peas, beans and potatoes. Muriate of potash is the form most commonly used.

Complete fertilizers contain all three elements mentioned above in different combinations of nitrogen (N), phosphorus (P) and potash (K) such as 4-8-8, 2-12-4, 4-12-6 etc., each of which is recommended for a different purpose. The most useful combination for the victory garden is 4-8-8 or the brands known as "Vigoro" or "Gardenite".

Size of				Fe	ertili	zer Ta	able		
Garden Manure in Sq. ft. Alone				Manure & Fertilizer			Fertilizer	Fertilizer Alone	
500	500	lbs.	or	1/4	ton			manure fertilizer	30 lbs.
1000 1	,000	lbs.	or	1/2	ton			manure fertilizer	60 lbs.
1500 1	,500	lbs.	or	3/4	ton			manure fertilizer	90 lbs.
2000 2	2,000	lbs.	or	1	ton			manure fertilizer	120 lbs.
2500 2	,500	lbs.	or	11/4	ton			manure fertilizer	150 lbs.
3000 3	,000	lbs.	or	11/2	ton	1500	lbs.	manure fertilizer	180 lbs.

If at all possible use manure where the soil is poor or of a very light nature. The manure should be plowed or spaded into the soil (preferably in the fall) and the commercial fertilizer should be applied uniformly to the surface of the soil and raked in a few days before seeding.

APPLIED RESEARCH . . . (Continued from page 13)

The alternation of pastures for poultry is important and therefore is considered essential in good management practice. General health is enhanced by continuous supplementation of the concentrates by good pasture herbage.

The general nutritional value of the balanced ration held in storage for feeding may be threatened by the length of storage time, as well as by the temperature in the storage room. This fact may be especially true with the vitamins A and D. A concerted study is underway to determine possible storage losses in the essential vitamins.

Rate of growth in stock is basic to efficiency in meat production and general growth costs. Studies are underway to bring forth direct information relative to efficiency in growth rates of different pure breeds and crossbreeds in the popular breeds.



THE WOMEN'S INSTITUTES SECTION

Devoted to the activities of the Quebec Institutes and to matters of interest to them

Is Permanent Peace Possible?

by Grace A. Kuhring

Is permanent peace possible? I believe that it is. It seems to me that the war has taught the peoples of the world two lessons. One, that no nation can stand alone in the modern world, that all must be united and two, that when military victory is won this time they do not ever want to have another war.

There seems to be a good foundation upon which to build a just and durable peace, for these lessons will naturally lead to a determination to make a united effort to abolish war.

The Moscow Agreement with its statement that, "The United Nations will be as united after the war as they are during it", certainly brings hope to all the world that such a peace plan may be carried out.

Without being vindictive we know that there must be adequate punishment this time for those who have thrown the world into chaos. This lesson to future war-minded individuals would undoubtedly help to maintain world peace. If war lords knew that personal punishment awaited those who, without provocation led the world into war, they would be hesitant to take that step.

The old League of Nations came so near to success that its precedents are bound to influence any second great attempt to abolish war.

We have been too ready to say that the League of Nations has failed or that it is dead.

A survey of the accomplishments of the League since its establishment proves that it certainly has not failed.

That war has been avoided many times in the years between 1919 and 1939 is shown in the peaceful settlement by the League of thirty-six political disputes among the nations. Settlements sometimes made after the fighting had actually started. The repatriation of half a million prisoners of war after the First World War... The stamping out of typhus, cholera, small-pox and other plagues raging in Europe and the world-wide campaign against fatal diseases, testify that the League Health Organization has made and is still making its contribution

The control of the Drug Traffic and of the Vice Ring . . . The World Court which handed down sixty important decisions involving frontiers, finance and other delicate questions between nations and the significant fact that none of these sixty cases was ever appealed . . . That although the United States did not ratify the agreement of its President after the Paris Conference, no less than one hundred members of the International Labour Organ-

ization, of which the United States is still a leading member carry on in the wartime offices of that Organization in Montreal. The International Labour Organization has, since it was established, put through sixty-seven International Agreements which provided better working conditions, rest periods, shorter hours of work, vacation with pay and many other advantages for the working people of the world. These are only a few of the accomplishments of the League but enough in themselves to prove its worth.

The League is not dead. Forty-five nations remain members. The League Building in Geneva, with its library and invaluable archives, is still open and eighty officials are working there.

Twenty four years of accomplishment such as that shown by the League, and the vast amount of accurate statistics including a wide variety of subjects cannot be disregarded and the world is gradually coming to acknowledge this fact. A new organization will come into being after military victory is won and if it is not called the League of Nations, it is safe to say that it will certainly bear a striking resemblance to the old League.

Statements from Soviet Russia bear out the fact that that country envisages an international organization, not unlike the old League and possibly just a new edition of it

The opinion of most of the great leaders of our day seems to be that the League Covenant expresses our desire very adequately and that given the physical power to enforce its authority it might well be the basis upon which to rebuild the League and establish world peace.

Winston Churchill said in his speech at Manchester, "The Covenant of the League of Nations remains at once the wisest, the most noble, the most sane, and the most practical path upon which the men and women of every land should set their feet; on which they should march forward and for which they should strive with might and main. If the League of Nations has been mishandled and broken, we must rebuild it."

The League of Nations Society is a voluntary association of men and women whose aim it is to inform themselves and others concerning ways and means by which the anarchy of war may be replaced with a workable method of collective security that will establish a world of Peace.

Home Economics

by M. L. Kezar

How often have we mourned: "If only there was something I could do; but I am so busy washing dishes, sweeping, dusting, mending and preparing meals that I have no time to do anything really big". Let us remember that our place on the home front is as vital to Victory as the places occupied by our sons and daughters in uniform.

We hear quite frequently that the women of Canada are doing wonderful work for our country in the present crisis, mostly referring to those in uniform and those in industries and other war work. But there are others whose contributions are just as great and these should not be overlooked, for who is contributing more to the war effort than the patient homemaker, especially when she is whole-hearted and determined to do her bit?

In her hands are the care and improvement of the home and hers is no small task when we consider the many abilities she must cultivate and possess in order to make a success of her undertaking. There are many whose knowledge and experience render them especially helpful to others who have not had time and opportunity to acquire so many skills when they generously pass on suggestions which make household tasks easier and more pleasant.

In order to keep up and improve the standards of today in home-making food values must be considered. At this time nutrition is naturally receiving much attention, hence it is essential to learn as much as possible about foods, their combinations, preparation and cooking. The diet for the whole family should be considered and adapted as much as possible to the personal needs of everyone in the home. The packing of lunch boxes for those who need them is an important part of food planning.

Special attention must be given to substitutes, leftovers, to avoid waste and extra expense. Foods should be kept in clean cool and well-ventilated places.

Clothing

Dress should be neat, becoming and suitable for the work engaged in. Buying should be done carefully, according to needs and income. The study of fabrics is necessary, as well as a knowledge of sewing, re-making and repairing. If clothing and household furnishings are well cared for they will not only last longer but will have a better appearance.

Arranging the Home

The arrangement of the home should have in view the saving of labour, as well as the quality of attractiveness. Many steps may be saved in the home, especially kitchen, if the things in it are arranged for convenience, kept in good order and in their places. Work may be systematized that unexpected interruptions will not cause a lot of inconvenience or completely disrupt the order of work.

At the present time saving is another important matter for consideration. Economy in food, clothing, equipment, fuel, as well as in time are necessary.

Rationing

In order to co-operate with the Government in attempts to prevent inflation, it is necessary to keep informed concerning the War Time Prices and Trade Board suggestions, and to keep in touch with all changes in the regulations on rationing. There may be less of some things, but there is no reason to hoard, which is proven by the fact that few complaints of an insufficient supply of the necessities of living have as yet been heard.

Family and Social Relationships

Each member of the family should share in the responsibilities of the home and in the duties which must be done if there is to be relaxation for all. An interest in the community and its activities is necessary, each home doing its part to provide social life for the others.

Thousands of Canadian families are doing all this and more, the homemakers finding time to knit for the Services, pack boxes for overseas, do Red Cross work and find supplies for sufferers in war areas, as well as keeping up the work of the local organizations.

"We women of Canada have a big job to do on the home front. Many and varied are the little tasks we have before us, but we must never for a moment think of our contribution toward Victory as small."

W.I. Contest Announced

For the second year a contest in the making of seamen's vests is announced in Quebec Women's Institutes. A prize of \$10 cash is offered by Mrs. W. J. H. Kuhring, of Westmount, provincial convenor of National and International Relations, to the Branch making the largest number of vests this year. Last year's prize went to Lennoxville for the largest number made, and the second to Huntingdon Branch. The material for these vests was donated by an American automobile company, free, and the making of them is a worthy act due to the men who "go down to the sea in ships" in defence of the cause of freedom, and who deserve all that can be done for them in the way of supplying their needs.

Quebec W.I. To Hold Convention

Owing to war conditions no convention of the Quebec Women's Institutes was held last year, only the Board of Directors meeting to outline activities for the year. This year the Provincial Board, at a meeting recently, decided to hold a full convention if and when arrangements can be made at Macdonald College. It is expected that this rally will do much to strengthen the Branches and Counties in their work, as well as give opportunity for plans for more aggressive action.

Q. W. I. Notes

Argenteuil County. At Lachute Branch Mrs. Leggett read articles on current events. Morin Heights, with the help of Principal Scott of the High School, decided to organize a Parent-Teacher Association. Papers on Soybeans and their uses were given and surprise packages exchanged. Pioneer heard papers entitled "Women and Democracy" and "Hospitality Needed". Mr. S. Armstrong spoke on his recent appearances on the Farm Forums and his visit to the Broadcasting Station.

Bonaventure County. Replies came in from sailors who received ditty bags from this County. New Carlisle plans to fill 25 and Port Daniel 15 of these bags for next Christmas. The proceeds of a social evening at New Carlisle went for comforts for boys overseas. Port Daniel sponsored a community party for a local boy home for a short visit after 42 operational flights over enemy territory, and for a Nursing Sister home on embarkation leave before sailing on a Hospital Ship. New Carlisle had a paper on potato diseases followed by a quiz contest. Port Daniel was privileged to hear the paper on Parliamentary Procedure written by Mrs. W. J. H. Kuhring. New Richmond Branch discontinued meetings during the winter months.

Chateauguay County. Aubrey-Riverfield Branch had short discussions on gardening, mending and conservation of fuel. Dundee had a paper on "After School, What?" by Mrs. Charles Smallman. Howick had a photo contest and a demonstration on the care of silverware by Mrs. D. McCormick. Franklin Centre remembered a sick member with a sunshine box.

Shefford County. Granby Hill celebrated its twentieth birthday with a social hour of which an attractive feature was a cake decorated with twenty candles. An aged lady was remembered with a gift. South Bolton has secured a Travelling Library from Macdonald College. Warden sent food and clothing to an elderly woman in need.

Megantic County. Thirty-five dollars were spent in school prizes in this County, and more in sports. Moving pictures were shown in the Town Hall and gifts presented to members who were leaving town. Sunshine baskets were sent to sick and shut-in members of the community and a social evening arranged to raise funds.

Gatineau County. Aylmer East Branch had a meeting on National and International Relations, and had as guests Madame Irene Arnould, President of the United Nations Society, Miss Palasek of the Czecho-Slovakia Embassy, Madame Henri Beguin, Miss Sheila Macdonald, sister of Hon. Malcolm Macdonald, High Commissioner of the United Kingdom in Canada, and Mrs. J. Scott of Ottawa. The story of the formation of the United Nations Society was told by Madame Arnould and its aims, and

an interesting discussion on events in Europe followed. Plans were made for a salvage drive, and the sum of \$5.50 was raised on a travelling apron. Eardley Branch planned to raise comforts for the men of H.M.C.S. Gatineau. Comforts are to be sent to wounded soldiers in Hospital, and yarn is being secured for ditty bags. Mrs. Amm gave a reading on "Uncle Si's opinion of the W.I." Two quilts were completed and others commenced. Wakefield Branch received suggestions for the next annual programme. A donation of books was received for sailors and a paper on The Central School Board was given, followed by a contest on the Hand Books. Wright Branch is sendind garden seeds to Scotland and knitting was done for sailors as well as two dozen sewing kits. A sum of money was reported raised for a travelling basket. A birthday cake commemorated the fifth anniversary of the Branch.

Mississquoi County. Cowansville Branch entertained the teaching staff of the High School at a social evening. A donation was given to the Brome-Mississquoi Perkins Hospital. Mrs. Winsor gave a lecture on Russia, and Mrs. Stone read an interesting selection. A letter of thanks for toys sent to the Children's Memorial Hospital was read. Garden seeds were sent to Britain. Donors at the blood clinics were supplied with lunch by the Branch. Donations for the self-denial fund were received, and papers read on Welfare and Health, Agriculture and de-hydration of fruits and vegetables. Dunham furnished hot lunches for the school during the winter months, and sent fruit to a sick member.

This County mourns the loss by death of Miss Jessie Corey of Stanbridge East, a valued member for many years. Papers on Food, Ammunition and other phases were discussed as well as war-time recipes and other economies. St. Armand sent \$10 to the Self-Denial Fund, and \$3 for school treats. A sale table brought \$5.50 into the treasury.

Papineau County. This County has taken in many of the members of Templeton Branch, now inactive. The County Convention will be held in this Branch.

Rouville Branch made presentations to the retiring president Mrs. R. Thomson, and a life-membership pin to Mrs. Slack. Abbotsford sent seven and one-half pounds of garden seeds to Britain. A talk on New York in War-Time was given in the Branch by Miss Helen Buzzell, supervisor of Art in the Elementary Schools in Montreal. A social evening amounted to \$11.55.

Sherbrooke County. Lennoxville Branch received a letter of thanks from Madame Stein for the sum of \$12 sent to the Norwegian Relief Fund. A sum of money was voted for the relief of a family in need. Milby held a social evening in aid of the Provincial Emergency Fund and donated \$5 to the Red Cross campaign. Orford Branch

(Continued on Page 31)

Strippings

by Gordon W. Geddes

When this gets into print I hope the weather will be more seasonable than it is to-day. It was ten below this morning when it should be acting like spring. However, we did not get at the sugaring until about a week later than this last year though some tapping was done at this time.

Speaking of sugaring, it seems as if the Federation of Agriculture did not put any weight behind the demands of the maple producers. No mention of it is made in the brief submitted to the Cabinet. If it could not support a demand for the abolition of rationing, it could have asked for simplification of rules to aid producers who retail those products. Considerable concessions have been made but the Federation missed the boat in getting any credit for them. If rationing is required, there is only one more point we would have liked changed. The extra allowance of syrup during the sugar season should have been put on a separate coupon like the sugar for rhubarb last year. This was required only to protect people from their own appetites since the allowance of syrup is fairly good only the majority of consumers have saved no D coupons. If the allowance had been made on a separate coupon, it could not have been used up in some other sweet. Such a recommendation was presented by several forums before the meeting with the Cabinet.

P. D. MacArthur's statement that the Federation should not be allowed to become just another pressure group was very encouraging. There is already too much government by pressure groups and adding another to press for the farmers would not help. However, with all other classes organized, farmers must organize to protect their rights and to resist unfair pressure from other groups. They should not keep quiet when another group makes an unfair request so that their own demands will be unopposed. It may seem a little hard to decline when an organization ceases to be a protector of its rights and be-



NATIONAL SELECTIVE SERVICE

If You Employ Male Persons

Have they all complied with the Military Call-Up?

By an Order signed under authority of the National Selective Service Mobilization Regulations:

- 1. Every employer of male employees must make an examination of the documents of these employees, and forward advice on those who fail to produce documents showing good standing under Mobilization Regulations.
- 2. This examination must be completed by May 1st, 1944.
- 3. "EMPLOYER" includes industrial and commercial employers, and also farm operators.
- 4. "MALE EMPLOYEE" includes all male persons working for
- 5. A booklet "EMPLOYERS' GUIDE," has been sent to industrial and commercial employers. A return post card has gone to farm operators.
- 6. If you employ any male person, and have not been notified of the survey by booklet or post card, contact the nearest Employment and Selective Service Office and ask for the booklet.
- 7. Workers in agriculture, of military age, who have not been rejected by the Army and who have not a Postponement Order should apply for such order to the nearest Registrar immedi-
- 8. Obligation to make the examination rests on each and every employer of male persons, and employers must act.
- 9. Penalties are provided for failure to carry out this examination, and for male employees failing to assist by refusal to produce documents.

THE NATIONAL SELECTIVE SERVICE MOBILIZATION REGULATIONS

DEPARTMENT OF LABOUR

HUMPHREY MITCHELL, Minister of Labour.

A. MacNAMARA. Director, National Selective Service. B-10-44-W

comes a pressure group. But when any more of hers. Incidentally, her last litter only short-term ones even for them.

The Federation's brief took a very insidies. Farmers certainly do not think much of that way of getting a reasonable price for their goods. But we know the farmer gets no more than his due and the subsidy is paid for the good of the consumer so we did not refuse the subsidy on our last hog shipment. Three of the four remaining from the litter made the A grade and the other a B-1. Since a little easier on our equipment. they were also of good weight they

group support demands for purely sel- is now down to eight as one left us fish reasons, it is certainly a pressure after it got to four weeks of age. Verdict group. And the benefits are usually of the inquest was death due to unknown causes.

Farmers are quite accustomed to telligent stand on the matter of sub- happenings from unknown causes, though they are not always deaths. For instance our bull, a small Jersey, broke a chain which held a big and cranky one. It was welded and he broke it again in a week. Here's hoping it doesn't get to be a habit with him. Perhaps I should explain to him that this is wartime and we all have to go

When I first heard of the Caisse Poaveraged \$29.47, a good enough price pulaire at Coaticook I thought probably so that we wished Trinka had saved it was the youngest of the co-op ventures



STEELE, BRIGGS SEED CO.

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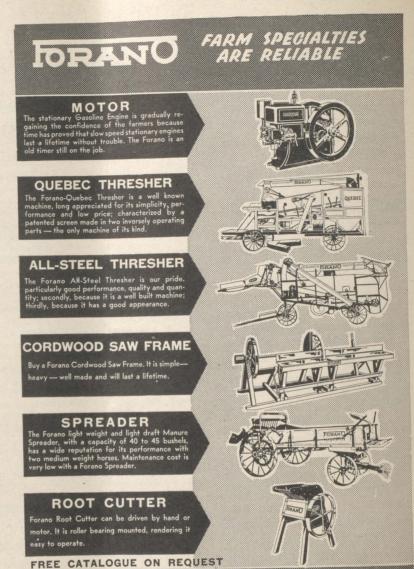
SOLD BY LEADING MERCHANTS

there. When I investigated, I found it was the veteran of them all. It was started in 1933 with about forty members. To-day it has seven hundred and ninety-five. With \$179,986 on deposit now, over \$1,562,000 have passed through it since it started. So it is quite worthy of its place on the list of local co-ops. In fact it helped the Barnston co-op creamery out with a loan of \$7,000 when it was getting started.

Robert Breault, secretary of that creamery, showed the co-op spirit when he came down twice to help us stir up interest in a similar creamery here. The first time he came to a Farm Forum meeting to tell us all about it. When we got to the stage where we began to enquire of some French farmers about joining, we found that some of them had already been doing some thinking along the same lines. So a bigger meeting was held and Robert obliged again in both languages. There is quite a bit to be done yet but it looks as if something might be accomplished. In fact, if enough of us get working together well, something is bound to happen.

"Most people would die sooner than think; in fact, they do so."

Bertrand Russell.



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Pithy Pickings

There is no more far-reaching investment for a nation than to put milk, food, and education into young children."

Winston Churchill.

"Educational reform is of vital importance to the people of Canada . . . We must offer to every boy or girl in the Dominion the right to attend school and university until he has attained the highest level of his intellectual competence."

> F. Cyril James, Principal, McGill University.

"I only wish that I had the eloquence to be able to make others feel the inspiration of a visit to Canada in war-time. Lord de la Warr.

Note the harmony of resolve in leaders of Canadian and British Agriculture. "The overwhelming determination" (of the Canadian Federation of Agriculture) "was, as with us, at all costs not to drift back through lack of defined policy to pre-war instability of raw material and food prices. That way lies destruction."

Lord de la Warr.





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Offering Young Pigs of Both Sexes From XXX Stock

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(REG.) C.B.R.

ORMSTOWN, QUE.

"Contour plowing" has been spoken of Stewardship as a modern development — "We now plow horizontally following the curvature of the hills and hollows on deal level, however crooked the lines may be. Every furrow thus acts as a reservoir to receive and retain the waters; scarcely an ounce of soil is now carried away . . . In point, of beauty nothing can exceed that of our waving lines and rows winding along the face of our hills and valleys." Thomas Jefferson.

When people try to live by getting more out of the land and out of each other than they give back, the community sickens and may die. But it has been shown that when they take care of the land and each other, they are likely to find eventual security through this stewardship of their physical and human resources.

Arthur Raper.

(See also inside back cover)

Letters from Farmers

MORE ABOUT SUGAR

Dear Farm Forum Secretary:

In your report on the broadcast you stated that the maple sugar discussion is pretty well "sugared-off". We think that it is still in the sap stage and is boiling briskly and there is lots of nitre in it. If you read the "Letters to the Editor in the Sherbrooke Daily Record in the minds of the maple sugar produyou can see that it is by no means settled cers of the Eastern Townships. Many in this district are talking of only making enough for their own use.

Edmond Bouker, Secretary, Flanders Farm Forum.

FARM PLANNING

Dear Farm Forum Secretary:

Much thinking apropos of the summary of ideas re—the maple sugar regulations, a paragraph in National Film Boards booklet re "Thought for Food", and the reference to Tullochgorum's suggestion regarding farm and district planning in your contribution to the Macdonald College Journal, has me burning to get these ideas out of my head and on to paper.

To begin with, the district planning idea came to me, also, last winter, during some of our forum discussions on crop planning, etc. - as it concerned the war effort. We seem to have almost the counterpart of the British system. (that is as I know it from the broadcast). We have our federal and provincial departments - district agronomes already in operation. If these could be extended to local and district farm committees, who would really be consulted, it would certainly be a step in the right direction, especially if these committees were authorized to exert a little pressure, at times to stimulate production of certain supplies as they were needed. All sorts of "good things" might develop from this once it were in motion.

The ideas on Page 9 of the NFB booklet on "Thought for Food" certainly stirs the imagination. It would seem that the possibilities of agriculture have hardly been scratched yet,

and, whereas I cannot see myself as being very enthusiastic over "collective farming" I can see a much better farm life for the average farmer when bigger and better equipment is made available through some kind of co-operation, whether it is government directed or not, preferably not of course.

One more thought — It seems to me from my casual observation that unless Forums as a whole are urged to take up some kind of definite action, that interest in discussions and study along will soon be on the wane. The district planning idea seems to be the logical follow up of what we have been trying to learn. You are in the right position to know if we have learned our lesson well enough.

Mrs. W. B. Holmes, Kingscraft Farm Forum.

Dear Farm Forum Secretary:

We have some comments to make regarding Mrs. Holmes letter. We like to think of Farm Forums as the missing link. We have organizations such as Agriculture Society, Farm Club, Institutes etc. We feel that the Forums help more people to know and appreciate these organizations and their uses to the people. The Forum news, views and opinions come to people right in their own home. Many people are being educated without realizing it. Many realize it and hope to learn more. When the leaders of these organizations approach the people about topics already discussed on the Farm Forum, these people have heard and thought about the importance of - say better health, schools, markets, etc. They are alert to the needs of their community, which perhaps had not entered their thoughts before. We must keep in mind, the farmer works long hard hours and often does not take time to plan even his own work. I think we have gone a long way when we know the difference in the number of interested people listening to this broadcast now and the number listening when it first went on the air.

Many of us like to read and study but due to shortage of help just have to be content with briefs and synopses. Many others will have to learn to read and study. To me this is the biggest job for our Forums. We need to know our neighbours, locally, nationally and internationally. It would cost a great deal to travel and contact the people that we enjoy hearing on the radio. The fourth night gives us a very good idea of how similar all our problems are.

Mrs. Helen McElrea, Glenday Farm Forum.

POOR RUBBER RINGS

Dear Farm Forum Secretary:

The ladies here are up in arms about the quality of the rubber rings sold for sealing fruit and canning jars claiming that when they take the full jars out, a large percentage of the rings have blown out rendering all their work useless.

We, the members of Hallerton Farm Forum, thoroughly agree with the resolution put forward by the Women's Institutes of the Province of Quebec regarding fair rationing of sugar as between rural and urban areas and in districts where much fruit is grown and we also ask the W.P.T.B. to give a fairer rationing of sugar as between said districts. Here in this district we have a city family who own a small farm. The finally consists of eleven members. They live in the city but come to the farm during the vacation period and summer week-ends. The lady of the house says she could not afford to buy the fruit and also the sugar, and therefore did not use anything like their preserve ration allowance of sugar, and not being on the farm permanently so they could grow the fruit they were forced to go without and country residents who had the fruit had to let it go to waste, for lack of sufficient ration allowance to preserve it, which gives one example of inequality of ration allowance as between urban and rural residents.

> Robert Hawkins, Secretary, Hallerton Farm Forum.



LIVING AND LEARNING



You're Telling Me!

by R. Alex Sim

The Farm Forum members have been telling me all winter. This is the fourth winter now. At first, this "telling" was hesitant. Now it is more militant, more sure, more informed. We used to say when the Farm Forum began, "The farmers have always grumbled, now let us organize this grumbling". That is, so arrange it that everyone grumbles about the same thing at the same time.

But grumbling is only part of the picture, a small part. It is more accurate to say, the farmers often have reason to be dissatisfied with conditions, policies, and the way these policies are administered. First, let them get all the facts they can on the topic in order that they can be sure they are on the right track. Perhaps in this fact-finding stage many will change their minds. Others will make up their minds more fully, but not on a hunch or a grudge, but with the facts and reasons.

Having thus reasonably decided on some issue, it is in the best interests of agriculture and the community that a decision be reached and published. If the problem has to do with government, it is in the best interests of the government that they become informed of these opinions. We have had instances of an administration appreciating the information they got from Farm Forums. This was part of the original idea of Farm Forums. Where is it getting us? Are we approaching realization of this idea? Let us cite a few experiences, a few facts.

If anyone is in doubt that the people in Farm Forums are progressing educationally, let him recall a group in the first year of effort; then let him visit a group that has been going for four years. If he needs more convincing let him visit the Farm Forum office at Macdonald College.

Here all the Findings and correspondence are carefully filed. Let's pick out a file on Maple Sugar. At the beginning of the season, we will find that there was plenty of grumbling but little information, and very little unanimity of opinion. As the Farm Forum office circulated the opinion of certain groups to the rest, as the law was studied and appreciated, as the new regulations came out and were studied, one could see, almost feel, the farmers reaching a unanimous decision. By the end of January, the officers were able to present to the Canadian Federation of Agriculture, and the Wartime Prices and Trade Board a detailed picture on maple sugar that is a credit to the collective thinking of the Quebec farmers.

The actual undertakings of the Forums are too numerous and too dynamic to mention. By that I mean, if we record some plans a Forum is making now, by the time this page reaches the reader the plans are changed and it looks as if we didn't know what we are talking about. The Forums are doing plenty of local planning. One member said, "We won't be satisfied in our three Forums until we have a credit union and a co-operative creamery."

Another evidence of progress may be found in this issue in the Letters to the Journal. These letters reveal some real thought. One could dig into them and ask questions that would lead to more thought. One could ask: Do farmers really expect a depression after the war, as Mr. Dagg suggests. Do they expect to have to give up laboursaving devices? Have farmers no time to read, as Mrs. McElrea argues? Are farmers unalterably opposed to government direction in matters agricultural as Mrs. Holms thinks? What about collective farming?

These letters reveal farmers are thinking on deep questions. They reveal that still deeper questions are going to be tackled. In four years the grumbling has been channelled into thinking, and when farmers speak nationally as they have every fourth night all winter, telling me what they think, I for one, am inclined to listen.

April always finds us sligthly frayed in the Farm Forum office. We think of taking a vacation in somebody's sugar bush, to steam out the fatigue in some heavy physical work. But a desk, heaped up with accumulations re Community Schools, re Camp Macdonald, re sundry other things reminds us that April is the month to catch up on neglected topics. And the spring tonic will work more of the above.

Abbotsford Rally Hears Kennedy

The Rougemont and Abbotsford Farm Forums shouldered joint responsibility for a rally to which all the Forums in the judicial district of Bedford were invited. The guest speaker was R. S. Kennedy, editor-in-chief of the Family Herald and Weekly Star.

It was Roger Babson who said, "More men and women should learn to tell their dollars where to go instead of asking them where they went."

Chateauguay and Huntington Organize

An enthusiastic mass meeting at Ormstown on March 27, representing almost every one of the 27 Forums in the counties of Chateauguay and Huntingdon, decided that a district committee of the Quebec Council of Farm Forums should be organized.

One executive member was elected from each community where Farm Forums are organized. These were: R. J. Reid, Hemmingford, Charles Waller, Franklin, Alan Crutchfield, Hinchinbrooke, Adam MacNeil, North Ormstown, J. D. Lang, South Ormstown, Rev. Bingham, Howick, Harry Angel, Riverfield. Howard Fraser was asked by the meeting to represent Dundee. Mr. Fraser consented to do so for that meeting but preferred to have the Dundee group elect their own representative. Chateauguay Basin, which was not represented is to be asked to elect a representative. The above executive met to appoint Mr. Lang its chairman, and Mr. Crutchfield its secretary. The first regular meeting is scheduled for April 12.

The steps leading up to this organization are interesting. Almost since the beginning of Farm Forums there has been an agitation for county or district organization, preferably of the Federation of Agriculture type. However, the lack of a provincial Federation of Agriculture rendered this proposal impossible. As Farm Forums began to discover some of the things they could do on a district basis, some such organization became a practical necessity.

At a Rural Life Conference, held at Ormstown last November, J. D. Lang of the Upper Tullochgorum Farm Forum made this important proposal. This was followed up by communication with the provincial Farm Forum office. Then Mr. Lang, George Collum, Alan Crutchfield and R. Alex Sim, got together at Montreal during the meeting of the Holstein Breeders Association. A memorandum was drawn up outlining the purposes of such a district organization as follows:

- (a) To keep in touch with agronomes in regard to new policies and developments.
- (b) To study production goals for each year, and to make

plans for the farmers in the district to meet these goals.

- (c) To collect the opinions of the farmers in the areas on live issues, and to present conclusions reached to the appropriate authorities and to call special meetings when necessary.
- (d) To hold conferences to study farming and social problems in the area.
- (e) To promote and organize new Farm Forum groups.
- (f) To foster co-operative organization, studying the situation, to see that co-ops are undertaken only when they are needed.

The Ormstown meeting which had over 200 delegates present, unanimously adopted the following "constitution" or working plan for the District Committee.

Name: The Chateauguay-Huntingdon Committee of the Quebec Council of Farm Forums.

Membership. All the Farm Forum members of the district shall constitute its membership which shall elect an executive from one member of each of the following communities: Hemmingford, Franklin, Hinchinbrooke, Dundee, Howick, Riverfield, Chateauguay Basin, North Ormstown, South Ormstown. Officers of the executive shall be appointed by the executive from its members. Objects.

- (1) To promote and organize Farm Forums.
- (2) To study and interpret the conditions and needs of the district to the Quebec Council of Farm Forums.
- (3) To act as a medium through which government policies may be studied and implemented.
- (4) To plan projects for the district.

Meetings.

The executive of the committee shall meet quarterly and more often if necessary.

The other parts of Quebec can be expected to study this move in Chateauguay and Huntingdom with keen interest.

Camp Macdonald '44 Meets Aug. 19 to Sept. 4.

Last year the Adult Education Service operated two camps, one at Cedar Lodge on Lake Memphramagog, the other on the Macdonald College Campus. This year there will be one camp on the Cedar Lodge site occupying two weeks and three week-ends.

While the details of the program cannot be announced yet, the Staff Council of the Service has decided that the first week will be devoted to the problems of the discussion group, and other group programs. Special emphasis will be placed on Farm Forums and Citizens' Forums. It is also likely that a section will be set up for group workers in such organizations as the Y.M.C.A., Y.W.C.A., youth organizations, etc. The second week will be devoted to problems of community organization. A special section will be operated for community school executives. A special course in recreation leadership will be given throughout the three weeks.

Ormstown Rally Told Farm Labour plans

George Haythorne, Associate Director of National Selective Service was the guest speaker at the Farm Forum rally in Ormstown, March 27. He outlined in brief the plans of Selective Service for alleviating the farm labour shortage by making sure that such labour as was available would be sent where it was most needed. He stressed the fact that this could only be done if the farmers keep Selective Service informed as to what their needs are - how much help they require and for what periods of time. He urged that each individual farmer decide upon his labour requirements and make them known to his local Selective Service Office. Regional local offices are to be set up under Armand Terrault, agricultural advisor, to deal specifically with requests for farm labour. District agronomes will have six or eight farm labour assistants to ascertain where the need is greatest and what needs should be met first. They will co-operate with the Quebec Farm Labour Supply Bureau.

Mr. Haythorne said that the manpower possibilities of 1944 looked better than last year. The loss to recruiting and industry are not above the ratio of new people coming of age. Selective Service is planning to get the 60,000 seasonal workers who left farms in the fall to work in essential war industries to go back to the farms where they are most needed. Spring leaves of two months duration will be given to members of the Army and Air Force whose services are required back on the farm. Requests for such help should be sent in to the local agronome. Postponments of service will be given to farm workers either for work on their home farm, or for work on another farm where labour is short. Also, the Selective Service is planning to direct men to farms who are physically unfit for military service, but who have had experience in, or are suitable for work on the farm. Similarly, they may direct men in the lower medical categories who are being discharged from Canada's Home Defense Army, or men who are being laid off from war plants to work in Agriculture.

Mr. Haythorne admitted that offsetting this somewhat more hopeful side of the picture was a greater demand for labour. The season, last year was not as good as usual and therefore fewer people were needed for harvesting. This year too, production goals are higher. The first line of defense in this war is and has been the farmer himself and his wife. They are the ones who have raised the food, and raised more of it than before and with less help than was thought possible. The government realizes the growing importance of food and will do everything in its power to see that the farmer gets the help he needs — though this is admittedly a very difficult task.

Q.W.I. NOTES . . . (Continued from Page 24)

summed up the year's activities in their annual reports, totalling a most satisfactory whole. Cherry River closed the year and began a new one with a successful and enjoyable meeting.

Stanstead County. Ayer's Cliff has been interested in the case of a young girl with failing eyesight. She has been taken to a specialist and the matter has now been referred to the Institute for the Blind. Two needy children are being given a hot dinner by W.I. members and W.A. alternate weeks.

Beebe had a card party to raise funds for school prizes. A brief review of the history of this branch was a feature of the meeting.

Dixville has had two card parties to raise funds to send cigarettes to their local boys overseas.

Interesting news items were read at the North Hatley meeting and wartime recipes formed the rollcall. A recommendation was sent to the school board asking that hot cocoa be served in the school until Easter.

Stanstead North had a "Gentlemen's Day" when the men were all asked for dinner. This branch donated food for lunches at the blood clinic held in Rock Island.

Tomifobia is enjoying a McGill Travelling Library. Through the co-operation of the W.I. this community is now on a National Film Board circuit.

Health pamphlets were distributed at Way's Mills by the convenor of that department and were studied at the meeting.

The county president, Mrs. B. W. Brown, has attended several branch meetings this month giving a report of the recent semi-annual board meeting in Montreal. Mrs. Grant LeBaron of North Hatley, provincial convenor of Welfare and Health, has covered the rest of the county.

Note. All Conveners are reminded that all work done for War Services should go to Mrs. Howard Smith, Loretteville, Que.

PEACE . . . (Continued from page 22)

The League has many branches already established. If there is one in your community, go to its meetings, listen to the discussions and join them. If there is none, form a branch no matter how small, for a start.

Informed public opinion must be the basis of any plan. It is your duty as a citizen to become informed and not to leave everything to a few men in political circles to speak for you.

Know what you want and be prepared to give your decisions when they are requested. Then when your Government is asked to take a stand it will know that it speaks with the voice and backing of the people of Canada.



THE COLLEGE PAGE

Farm Youth, An Asset

by L. H. Hamilton

Director of Diploma Courses

During the war period we have received many letters from former Diploma Course boys who are now overseas. With very few exceptions they particularly mentioned their good fortune in having been to Macdonald College. It really meant something to them. They developed mentally and physically and learned to get along with their neighbours. One former student, who came to us from a good farming district, recently wrote to say that he had received his commission in the R.C.A.F. and, being a pilot officer, had a group of young men under him, who, incidentally, were all older than he was. He was justly proud of his success. He is not an exception. He is simply an example of the latent intelligence and ability in many of our rural communities. His people were not well off. He did not have an opportunity to complete his high school training and when he completed his course at Macdonald he had to work to earn money to be used for buying a farm in the distant future.

While there is much talk these days about prices and bonuses, there has been little said about opportunities for farm youth. What is being done at present to make sure that this important resource is to be fully developed? The value of education has never before been so fully appreciated as it is today. In the army, in war industries and on our farms, people with educational training are being sought and pushed forward into positions of greater and greater responsibility.

Agriculture should, and no doubt, will, occupy an important place in our economy of the future. To achieve and maintain this position, we will need rugged, independent, clear-thinking and efficient farm people. Should we not start now to develop this kind of future farmer? This can be done by utilizing more fully the facilities that are now available and by increasing these facilities when and where necessary.

This is an opportunity for community action. Recently I learned of a very poor community undertaking a similar programme of education. Each year they sent one or more young men away to college at the community expense. This plan has not gone far enough to say it is successful

but is there any doubt about it? The chosen candidates are carefully selected and appreciate their opportunity. They are bound to make a success. Such a step need not be taken in most districts of Quebec but the idea of getting together seems sound. What community would not benefit from such a move? What an advantage it will be when the war ends to have a real community programme already started!

One of the first steps is to appraise the educational facilities, particularly for farm boys. This is not a charge account or cost item. It is an investment that has paid in full, and will continue to pay, big dividends. Our farm boys need the opportunity. Canada will benefit greatly by affording it.

A New Course Offered

Beginning next session, agricultural engineering will be a major subject of specialization at Macdonald College.

The new "option" has been set up to help meet the growing demand for agricultural engineers and judging from the inquiries about the new course we have already received from students it will be a popular one. Several new courses in agricultural engineering have been added to the curriculum and the two-year schedule as now planned will give the student ample training in the subject without neglecting necessary courses in other subjects, all of which will round out the training so that the graduate will leave Macdonald with a good knowledge of engineering, especially as it applies to land work, plus a sound training in agriculture in general.

Clement Gauthier, who started the Degree Course in 1939 but withdrew to enlist in 1940, has been promoted Captain, we are informed by Mrs. Gauthier. Clement joined the Reserve Army in 1937 and obtained his commission in 1939. He went active in October 1940 and went overseas in November 1941 with the rank of lieutenant, and has been on duty overseas ever since.

Remember that:-

- (a) One D coupon is worth 40 ozs. of maple syrup only until May 31st.
- (b) Premiums of \$3 per head for grade A carcasses and \$2 for grade B1 will be paid for delivering hogs for slaughter to inspected plants or other approved establishments.
- (c) It is no longer necessary to obtain permits for tire retreading.
- (d) Sales of poultry grit must now be made under ceiling prices.

* * *

Canada's food production reached a record peak last year — 40% higher than in 1938 — but is still too low to meet demands.

* * *

"The old so-called free competition of pre-war days failed us in the depression period, and it also had to be discarded in the present war period . . . it is obvious that it can no longer be depended upon to serve us adequately and efficiently in the future. Equality for agriculture must be assured through practical measures in economic affairs and government action."

H. H. Hannan, president, C.F.S.

* * *

The question that we are all asking ourselves, whether businessmen or farmers, is whether a genuine attempt is going to be made to give us economic stability — planned markets and stable prices, or are we to return to what has been described as the law of the economic jungle.

Lord de la Warr.

* * *

A Voice Across the Wire

A voice across the telephone
Can make or mar the day,
Be careful of the tone you use
And think of what you say.
Your pleasant smile may not be seen,
Or known your kindly heart,
For people at the telephone
Are often miles apart.
Then sow a smile and reap a smile
And in the end you'll find
That nothing pays more interest
Than the art of being kind.

-Charles T. Myers.



GET MORE WORK FROM FARM MACHINES

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With about 25% fewer men on the land, Canadian farms are supplying almost 50% more produce!

Congratulations, Canadian farmers, for a big job well done!

Never was the maintenance of your farm machinery so vital to you! Farm machinery, essential to the war effort, deserves the same

attention which the army and navy give to their equipment—and that is the best fuels and lubricants the industry can produce.

Therefore, see your nearest Imperial Oil agent today, for those are the very fuels and lubricants he supplies!

Remember, it costs you less money to keep equipment at high effici-

ency, than it costs to make repairs when breakdowns occur. Let the Imperial Oil agent supply you.

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